

A STUDY TO EVALUATE THE EFFECTIVENESS OF MUSIC
THERAPY IN TERMS OF DEPRESSION AMONG CLIENTS ON
HEMODIALYSIS IN A SELECTED
HOSPITAL AT KERALA



COIMBATORE

A DISSERTATION SUBMITTED TO THE TAMILNADU
DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL
FULFILLMENT OF REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING

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BY
NIMI PAUL

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DEDICATION



DEDICATION

I dedicate this book to

*The **God almighty** who blessed me to finish this work successfully.*

*I dedicate this book to my **grandparents**,*

Mr. N.V.VARGHEESE , and Mrs .ANNAMMA VARGHEESE

*I also dedicate this book to **my parents**,*

*Dr. PAUL JACOB & Mrs. AMMINI PAUL, those who made my life
purposeful and meaningful.*

*I dedicate this book to my loving brother in law Mr. BABU KURIAKOSE, naughty
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ABSTRACT



ABSTRACT

Music Therapy can alter brain patterns and offer therapeutic help for patients suffering depression who is on hemodialysis. There are a number of clinical research studies showing the benefits of this music therapy.

Hence the research study was conducted among clients on hemodialysis with depression which was aimed to reduce the level of depression by music therapy.

The objectives of the study include;

- To assess the level of depression among clients on hemodialysis.
- To evaluate the effectiveness of Music Therapy on level of depression among clients on hemodialysis.
- To determine the association between the level of depression among clients on hemodialysis with their selected demographic variables.

The research design adapted to this study was a pre experimental design. The conceptual frame work for this study was based on Emogen King's Goal Attainment theory. The study was conducted in Malankara Orthodox Syrian Church Medical college hospital at Kerala.

Non Probability purposive sampling technique was adopted. The sample size was 30. Level of the depression was assessed by using modified Beck's Depression Scale before and after intervention. The intervention of Music Therapy (Karakarapriya, Sindhu bhairavi, Kalayani raga, Hindola and Mohana) given for 14 days for 20minutes. Paired't' test was used to evaluate the effectiveness of Music

Therapy to reduce the level of depression. The obtained' value 12.72 was significant at $p < 0.05$. With regard to the association between the level depression of with their selected demographic variables education and type of vascular access had a significant association with level of depression. It also revealed that music therapy intervention reduced the level of depression.

Keywords: Effectiveness, Music Therapy, Level of depression, Hemodialysis.

CONTENTS



TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE NO
I	INTRODUCTION	1
	❖ Need for the Study	6
	❖ Statement of the Problem	9
	❖ Objectives	9
	❖ Hypotheses	9
	❖ Operational Definitions	10
	❖ Assumptions	10
	❖ Delimitations	11
	❖ Projected Outcomes	11
II	REVIEW OF LITERATURE	
	❖ Studies Related to Prevalence of depression among clients on hemodialysis.	12
	❖ Studies Related to Music Therapy	16
	❖ Studies Related to Effectiveness of Music Therapy on Depression among clients on hemodialysis.	18
	CONCEPTUAL FRAMEWORK.	22
III	METHODOLOGY	25
	❖ Research Approach	25
	❖ Research Design	25
	❖ Setting of the Study	29
	❖ Population	29

CHAPTER	CONTENTS	PAGE NO
	❖ Sample	29
	❖ Criteria for Sample Selection	30
	○ Inclusion Criteria	30
	○ Exclusion Criteria	30
	❖ Sampling Technique	30
	❖ Description of the Tool	31
	❖ Scoring Procedure	31
	❖ Intervention	32
	❖ Validity and Reliability	32
	❖ Pilot Study	33
	❖ Data Collection Procedure	34
	❖ Plan for Data Analysis	34
	❖ Protection of Human Rights	35
IV	DATA ANALYSIS AND INTERPRETATION	36
V	DISCUSSION	67
VI	SUMMARY CONCLUSION AND RECOMMENDATIONS	70
	❖ Summary	70
	❖ Major Study Findings	71
	❖ Conclusion	72
	❖ Implications of the Study	72
	❖ Recommendations	74
	REFERENCES	
	APPENDICES	

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1	Frequency and Percentage Distribution of Clients on Hemodialysis in Relation to their Demographic Variables	37
2	Frequency and Percentage Distribution on Level of Depression in Pretest among Clients on Hemodialysis	43
3.1	Frequency and Percentage Distribution of Pre-test and Post-test Level of Depression among Clients on Hemodialysis.	45
3.2	Mean, Standard deviation, Mean Difference and 't' Value of Pre- test and Post test Level of Depression among Clients on Hemodialysis.	47
4.1	Frequency, Percentage Distribution and χ^2 value on Pre-test Level of Depression among Clients on Hemodialysis with their selected Demographic Variable.	49
4.2	Frequency ,Percentage Distribution and χ^2 value of Post test level of Depression among Clients on Hemodialysis with their selected Demographic Variable.	58

LIST OF FIGURES

FIGURE NO.	CONTENTS	PAGE NO.
1	Conceptual Framework Based on Kings Goal attainment Theory.	24
2	Schematic Representation of Research Methodology.	28
3	Percentage Distribution of Pre Test Level of depression among Clients on Hemodialysis.	44
4	Percentage distribution of Pre Test and Post Test Level of Depression among Clients on Hemodialysis.	46
5	Mean value of Pre test and Post test Depression among Clients on Hemodialysis.	48

LIST OF APPENDICES

APPENDIX	TITLE
A	Letter Seeking Permission to Conduct the Study in Hospital at Kerala.
B	Letter Granting Permission to Conduct Study in Hospital at Kerala.
C	Letter Requesting Experts Opinion for Content Validity of the Tool.
D	List of Experts who Validated the Tool.
E	Structured Self-Administered Questionnaire (English).
F	Structured Self-Administered Questionnaire (Tamil).
G	Structured Self-Administered Questionnaire(Malayalam)
H	Evaluation Criteria Rating Scale for Validation of Tool.
I	Intervention on Music Therapy
J	Evaluation Criteria Check List for Validation of Intervention on Music Therapy.
K	Content Validity Certificate
L	Criteria for Sample Selection among clients on Hemodialysis.
M	Letter Seeking Consent of subjects participation in the study (English, Tamil, Malayalam).

INTRODUCTION

CHAPTER 1

INTRODUCTION

“Music gives soul to the universe, wings to the mind,

Flight to the imagination and charm and gaiety to life and to everything”

-Plato (Ancient Greek Philosopher)

End-stage renal disease (ESRD) has a significant impact upon the lives of sufferers. The stressors, including medication effects, dietary constraints, fear of death and dependency upon treatment, may affect quality of life. It has been widely claimed that depression is the most common psychopathological condition among patients with ESRD.

Music Therapy is a part of art which is used as a therapeutical tool for restoring, maintaining and improving the mental, physical and emotional health and well being. Music affects the limbic system which regulates deep emotions and many involuntary physical operations and reactions.

Clients who are depressive about requiring hemodialysis had their depressive level reduced by listening to relaxing music (Karakarapriya, Sindhu bhairavi, Kalayani raga, Hindola and Mohana). Music is used as the powerful tool to encourage clients on hemodialysis to act and show their coping strategies.

Black M Joyce and Jane Hokinson Haws, (2001) stated that nephrology is the medical specialty concerned with kidney diseases. The loss of kidney has many

different causes such as diabetes mellitus, hypertension. Common renal disease involves nephritis, nephrotic syndrome, renal cyst, acute kidney injury, (renal failure) chronic kidney disease, urinary tract infections, and nephrolithiasis and urinary tract obstructions. A sudden drop of kidney function is called acute kidney failure and is often short lived but can occasionally lead to lasting kidney damage. It is characterized by azotemia.

Bare,G.Brenda,Smeltzer, C.Suzanna(2005) stated that Renal failure is the partial or complete impairment of kidney function. There is an inability to excrete metabolic waste products and water, as well as functional disturbances of all body system. Renal failure is classified as acute or chronic.

Chronic Renal Failure (CRF) is the progressive loss of kidney function. The kidneys attempt to compensate for renal damage by hyper filtration (excessive staining of the blood). Over time, hyperfiltration causes further loss of function. Chronic loss of function causes generalized wasting (shrinking in size) and progressive scarring within all parts of the kidneys. In time, overall scarring obscures the site of the initial damage. The normal GFR is $120\text{mL}/\text{min}/1.73\text{ m}^2$). Among individuals with chronic Kidney Failure, the stages are defined based on the level of kidney function. About 80% of the GFR may be lost with few overt changes in the functioning of the body in stage 5.

Chronic Kidney Disease is divided into 5 stages,

Stage 1 : Slightly diminished function; kidney damage with normal or relatively high Glomerular Filtration Rate($>90\text{ml}/\text{min}/1.73\text{m}^2$).

Stage 2 : Mild reduction in Glomerular Filtration Rate (60-89 ml/min/1.73m²) with kidney damage.

Stage 3 : Moderate reduction of Glomerular Filtration Rate (30-59 ml/min/1.73m²).

Stage 4 : Severe reduction in Glomerular Filtration Rate(15-29 ml/min/ 1.73m²)

Stage 5 : Below 15 ml/mt/1.73m²: Kidney Failure

There are three choices of treatment for kidney failure include

- Dialysis (Hemodialysis and peritoneal dialysis)
- Kidney transplant
- Conservative or supportive care without dialysis.

Hemodialysis is a medical procedure that uses a special machine to filter waste products from the blood and to restore the normal constituents to it. For hemodialysis to be carried out, a large blood vessels with a fast blood flow needs to be accessed.

It is well understood that kidney failure and further therapy like Hemodialysis can be challenging both physically and emotionally. These emotional and physical challenges can be the basis for successful adjustment that includes 2 key elements: optimal clinical care and the residual ability to perform. In essence, a hemodialysis patient can live long enough a high quality of life and live independently and productively, if they are first able to function well mentally and physically.

The clients on hemodialysis have shown a wide range of psychosocial symptoms (Taylor), including depression, denial, grief reaction, anxiety, cognitive distortions, and negative automatic thoughts commonly.

The Prevalence of depressive illness has been found to be high in dialysis patient (American Psychiatric Association (APA) in 1987). Concerning about the emotional effects, Depression has been described as the most common health disorder amongst patient on chronic dialysis therapy that eventually increases the incidence of medical morbidity and further death. Despite these factors, Depression is under-recognized in dialysis patients and therefore untreated. Furthermore, medical studies emphasize that depressed patients perceive dialysis as more intrusive than patients without depressive moods. These depressed patients further score lower in Quality of life inventories adding to poorer social adjustments and decreased behavioral compliance with dialysis treatment regimen. Meanwhile, emotional turbulence of depression also proceeds weakening of immune dysfunction; ultimating to increased infection rates. Physically, depression worsens a patient's condition in advance with abnormal gluco-corticoids and pro-inflammatory stage.

During depression, the activities of brain are found considerably varying at different levels. Researchers studying clinical depression tend to look at several aspects of brain function including the structures of the limbic system and the functions of nerves within neurons. The interesting findings from them include the linkage between amygdale and hippocampus with neurotransmitters that work as a complex system disturbing or affecting mood and behavior. This includes association of depression with serotonin, nor-epinephrine and dopamine levels in the brain.

Nor-epinephrine, the major neurotransmitter has been identified at lower level among depressed patients. In addition to this, serotonin (5-HT) activity is another important factor that is found less. Researchers have pointed the combined reduction

of nor-epinephrine and serotonergic neurons activity in the dorsal raphe nucleus and limbic system eventuate to depression. Furthermore, PET (Position Emission Tomography) images for depressed patients have proven abnormally diminished activity in prefrontal cortex.

Though depression is a major problem, its solution is very handy by alternative therapies. Many alternative therapies have been reduced level of depression who is on hemodialysis. They are

- Music Therapy-It is the behavioral science concerned with the systemic application of music to produce relaxation and desired changes in emotions, behavior and physiology.
- Aromatherapy- is a form of alternative medicine that uses volatile plant materials, known as essential oils, and other aromatic compounds for the purpose of altering a person's mind, mood, cognitive function or health.

Other complementary therapies are:

- Meditation
- Deep breathing and muscle relaxation technique
- Massaging and healing touch

“Music washes away from the soul the dust of everyday life”

-Berhold Auerbach

Music has frequently been used as a therapeutic agent from the ancient times. Music is a kind of yoga system through the medium of sonorous sound, which act upon the human organisms and awakens and develops their functions of extent of

self realization. Melody is the key note of Indian Music. The “Ragas” is the basis of the melody. Various Ragas have been found to be very effective in curing many diseases.

The use of music and sound effects to improve health is not a novel idea. According to musicologists, music is a form of language or communication that directly accesses the emotions without the intermediation of words and rational thoughts.

Need for the Study

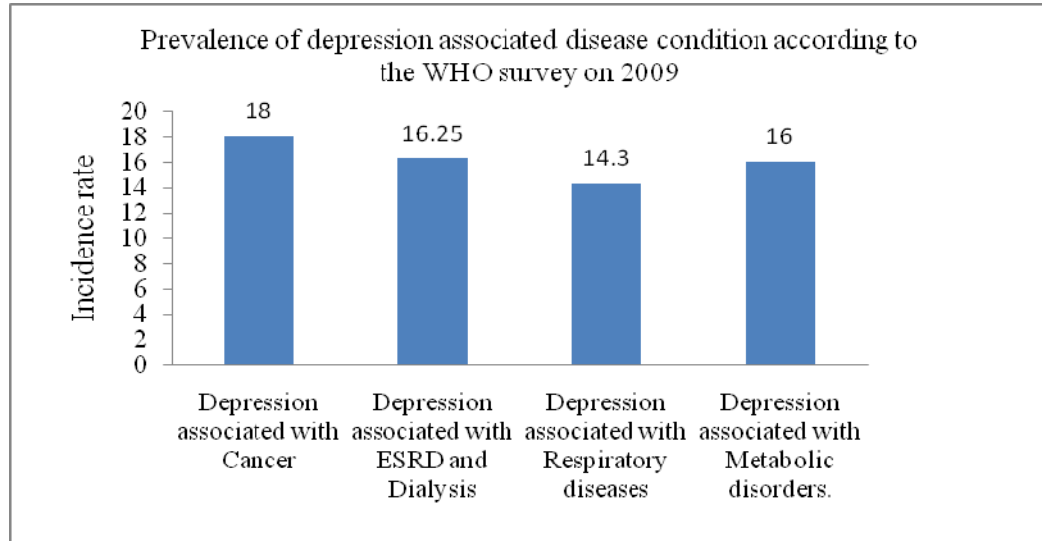
Depression is the most common psychological problem among hemodialysis patients (Chih-Ken Chen). In the general population, the prevalence of major depression is approximately 1.1%–15% for men and 1.8%–23% for women. However, the prevalence of major depression among ESRD patients is approximately 20%-30%, and it may be as high as 47%.

In worldwide 34% patients were suffering from depression among the clients who are on hemodialysis (British Journal of Clinical Psychology)

WHO (2009) conducted a worldwide study among selected countries to identify the existence of Depression with major disease conditions existing worldwide. The survey findings revealed that depression associated with ESRD and dialysis stood second with a prevalence rate of 16.25 surpassing depression associated with respiratory disease and metabolic disorders.

According to National Institute of Mental Health, nearly 10% patients suffering the depression due to the End Stage Renal Disease.

The following bar diagram represents the pattern of association



Kanniammal (2009) conducted a study to identify prevalence of depression among dialysis patients in Tamilnadu. Subjects were recruited from the Tamilnadu Urban Rural Epidemiology Study (CURES), involving 26,001 subjects randomly recruited from 46 corporation wards of different locations of Tamilnadu. 25,455 subjects participated in this study (response rate 97.9%). Depression was assessed by using a self-reported and previously validated instrument, the Patient Health Questionnaire (PHQ) 12. Age adjustment was made according to the 2001 census of India. The overall prevalence of depression among samples was 15.1% (age-adjusted, 15.9%) and was higher in females (females 16.3% vs. males 13.9%, $p < 0.0001$).

Joseph (2010) conducted a study to identify the presence of significant depressive symptoms common in patients with end-stage renal disease. The results revealed that 20–30% of end stage renal disease patients have significant depressive symptoms. Recent evidence highlights the impact of depression upon mortality, and

its association with non-adherence and immune parameters. Furthermore, it also highlighted experimentation of cognitive behavioral therapies and alternative therapies like music that has promising effects on reducing depression.

Alberto et.al, (2002) conducted a study at United States and 5 European countries and identified depression as the major culprit in rising the mortality and morbidity of patients on Hemodialysis. The incidence identified was 20%.

Kim KB et al (2006) conducted a non equivalent control group pretest and posttest design to determine the effect of music therapy on depression among 36 patients in Korea by using Music preference questionnaire and depression measurement. The study revealed that patient on hemodialysis who received Music Therapy had less depression than patients on hemodialysis who did not receive Music Therapy.

Much of the current therapies in music focus on providing that music have measurable psychological effects. Studies using EEG found out that a peculiar phenomenon called “Mozart” enhances the brain activation including the emotional centers - amygdale and associated structures. Eventually, it leads to increase in the levels of nor-epinephrine and dopamine which are found at lower level among the depressed patients. Apart from having effects on the above said neurotransmitters, it also has special effects on serotonin. With the music effects, serotonin are released from seratonergic areas of the amygdale that has much implication on patients mood by ‘positive shock’, which involve in the transmission of nerve impulses that help maintaining joyous feeling. In-addition to this benefit, music can augment patient

relaxation. According to the observations, it is also comprehended that music influence and modulate brain waves.

Comprehending the above studies, the investigator herself has co-related her personal experiences encountered while working as staff nurse. The reflection of the thoughts had prompted the investigator to take initiative to alleviate the symptoms of depression experienced by the client's on hemodialysis through Music Therapy. There is a need to study in this topic and also to reduce the depression.

Statement of the Problem

A Study to Evaluate the Effectiveness of Music Therapy in terms of Depression among Clients on Hemodialysis in a Selected Hospital at Kerala.

Objectives of the Study

- To assess the level of depression among clients on hemodialysis.
- To evaluate the effectiveness of Music Therapy on level of depression among clients on hemodialysis.
- To determine the association between the level of depression among clients on hemodialysis with their selected demographic variables.

Hypotheses

- H₁ There will be a significant difference between the mean pre and post test score on the level of depression among clients on hemodialysis.
- H₂ There will be a significant association between level of depression among clients on hemodialysis with their selected demographic variables.

Operational Definitions

Effectiveness

It refers to the outcome of Music Therapy in terms of reducing depression among the clients on hemodialysis.

Music Therapy

It refers to target oriented use of certain music ragas such as Karakarapriya, Sindhu bhairavi, Kalayani raga, Hindola and Mohana to restore, maintain and improve emotional health and well being among clients on hemodialysis. Take each part of the ragas and combined together and providing 20minutes in once a day for 14 days.

Depression

It refers to a worried state of mood in which clients on hemodialysis feel sad, helpless, hopeless, and worthless as measured by modified Beck's depression scale.

Clients on hemodialysis

Clients who are diagnosed to have ESRD admitted for Hemodialysis.

Assumptions

- Music Therapy may reduce depression
- Music Therapy has no side effects on clients on hemodialysis who experience depression

- Music Therapy may help to improve the emotional health and well being among clients on hemodialysis.

Delimitations

- The study was delimited to clients on hemodialysis.
- The study was delimited to a period of 6 weeks

Projected Outcomes

- The study will help the nurses to assess the depression level by using modified Beck's depression scale.
- The study will help the nurses to identify the effectiveness of Music Therapy in reducing depression.
- The study findings will help the nurses to incorporate Music Therapy as an intervention among clients on hemodialysis in coping with depression.

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

Review of literature is an important step in the development of any research project. It helps the researcher to analyze what is known about the topic and to describe methods of inquiry used in earlier work including the success and short comings. It gives a broad understanding of the problem. According to Basavanthappa B.T (2006), “the review of literature is defined as a broad, comprehensive in depth, systematic and critical review of scholarly publications, unpublished scholarly print materials and personal communications”. According to Polit and Hungler (2004), “literature review is a critical summary of research on a topic of interest, often prepared to put a research problem in context”.

Research literature were reviewed and organized under the following

- Studies Related to Prevalence of Depression among Clients on Hemodialysis.
- Studies Related to Music Therapy
- Studies Related to Effectiveness of Music Therapy on Depression among Clients on Hemodialysis.

Studies Related to Prevalence of Depression among Clients on Hemodialysis.

Kimmel et.al (2005) conducted a longitudinal study to identify the incidence of Depression among ESRD patients on Hemodialysis and identified that around 25% to 35% of sample have been affected. In addition to the significant findings, the study

was also able to limelight that the incidence of mortality and morbidity stood higher among the samples. The same study concluded by recommending further simple interventions to reduce Depression episodes among the Hemodialysis patients.

Johnson H and Dwyer A (2008) identified the perceived barriers to mental health services in 179 hemodialysis patient population using Becks depression inventory. Of the 103 patients who completed the surveys, 73.8% were African-American and 62.1% were male. Of the 54.4% patients identified with depression by scoring 10 or greater on the Beck's depression inventory, 34.0% had mild-to-moderate depression, 12.6% had moderate-to-severe depression, and 7.8% had severe depression. But the most striking finding of the study was that 70.6% of the samples did not know they had depressive symptoms.

Tavallaji Abbas (2009) conducted a longitudinal study among 70 enrolled hemodialysis patients in Iran and identified that 19 participants have had depressive symptoms. Statistical finding projected a higher hospital admission rate (94.7% vs. 55.1%, $p=0.002$; Pearson's chi-square test) as well as a higher likelihood of emergency department visits (73.7% vs. 40.8%, $p=0.002$; Pearson's chi-square test) among depressed patients. Finally the study emphasized prospective studies to identify whether treatment of depression could prevent hospitalization and unnecessary health care utilization.

Bossolo (2009) evaluated the prevalence of depression using Becks depression inventory among hemodialysis patients in a Mediterranean country. Interestingly the study results lime lighted that 42 out of 80 had depressive symptoms.

Moreover, univariate analysis of the data shown Beck's depression inventory score correlation with age and Charles co-morbidity index.

Khalil (2010), conducted a study to identify the negative effects of Depression among End Stage Renal Disease Patients to reveal 2 behavioral pathways includes the effects of depressive symptoms, inflammation, malnutrition and atherosclerosis. Moreover, the study also recommended including therapeutic interventions that would influence these pathways to improve patient's outcome. Finally study show that depressive symptoms were associated with nonadherence in patient with ESRD.

Cruz et al (2010) aimed to evaluate the impact of depression on quality of life in patients with end-stage renal disease (ESRD) on hemodialysis through a cross-sectional study among 70 patients. Depressive symptom inventory using Becks depression revealed that 36% of the sample had depressive symptoms. Regardless of the chronic condition, depressed patients also presented lower quality of life scores than non-depressed ones in all domains, and the most affected aspects were emotional, mental health social functioning and psychological domain. Moreover, linear regression analyses on depressive symptoms were predictive for lower quality of life in all domains.

Agganis (2010) conducted a cross-sectional cohort among 241 hemodialysis patients in Boston to recognize depression and cognitive function. Data analysis had shown a prevalence of 57 (23.7%) sample with significant depressive symptoms. Therefore, the authors established that depression not only impact the quality of life but also cognition related to processing speed and execution function.

Cengic B et al (2010) investigated the prevalence of depression among 200 hemodialysis depressive clients and its relation to various socio-demographic factors in Sarjeavo. Analysis of the data revealed that depression existed in various degrees among the sample at the rate of 30%, 8.5% and 12.5% in the form of mild, moderate and severe depression respectively. In addition to this, the most noteworthy findings were that the increase in age and level of education was inversely proportional to the level of depression, contrary to employment status. Meanwhile, final analysis also identified that the prevalence of depression is higher in the initial hemodialysis cycles ($p < 0.05$).

Hung Kuo-Chin (2011) explored the possible correlations between depression, age and economic status among hemodialysis patients through a cross-sectional study. For the study, one hundred and forty-six patients (65 males and 81 females, mean age: 63.8 ± 15.2 years) were enrolled. The Researcher used self-administered Beck Depression Inventory (BDI) to determine the presence or absence of depression symptoms. Result of the study highlighted that the prevalence of depression was 45.9% and an inverse correlation between BDI and ages.

Patridge et al (2011) conducted a survey between May and August 2007 in regional specialist centers at United Kingdom among 97 hemodialysis patients to identify the prevalence of depression and its correlation with psychological distress and morbidity. The study outcome pinpointed that, around 24.7% and 18.6% of the samples had depressive symptoms and associated anxiety respectively. Further analysis also revealed that these depressive symptoms among the sample were correlated with the body – image disturbance and non-adherence to the treatment regime.

Makara et al (2011) conducted an exploratory study to identify significant differences in frequency and severity of depressive symptoms among patients with end-stage renal disease depending on modality of treatment they are on hemodialysis, peritoneal dialysis and kidney transplantation. In the study, 206 of 323 sample were on hemodialysis. Data was collected using self structured questionnaires and Becks Depression Scale revealing an incidence of mild and moderate intensification of depression symptoms. Among this it was noted that, hemodialysis patients constitute the majority. Thus on briefing up, the authors recommended a frequent screening regime of hemodialysis patients for depression that enables early initiation of the treatment process.

Zouari et al (2011) evaluated the prevalence of the depression in patients on hemodialysis, and to identify the correlated factors. The study population included 106 patients on hemodialysis were the hospital-anxiety and depression scale was used to diagnosis depression. Final data analysis revealed that the prevalence of the depression among the patients surveyed was 46.2%. Meanwhile, among the 8 factors correlated with the depression at the univariate analysis, only 2 factors were still strongly correlated at the multivariate analysis.

Studies Related to Music Therapy

“Attention has recently been drawn to the contribution of the arts, and of singing in particular to health and wellbeing”.....

-Jakko Erikkila

Mandel S.E (2007) conducted a randomized controlled study to determine the effects of music therapy on health related outcomes in 103 cardiac patients. It

revealed that some health- related outcomes (changes in systolic blood pressure) may be affected positively by the participation in music therapy in addition to cardiac rehabilitation.

Toshua Leeds., (2008) conducted quasi experimental study to assess the influence of Musical rhythm in the perception of time and emotions of adult patients on hemodialysis about 48 samples. It revealed that more than 80% of the patients felt like time passed fasts after listening to the rhythm.

Jakko Krikkila., (2008) conducted study randomly controlled trial to determine effect the improvisational music therapy on the treatment of depression among 85 adults. It revealed that most of them compared music therapy to standard care and suggested that music therapy was accepted by people with depression and were associated with improvements in mood.

Nakayama H. et al. [2009] stated that to determine of Music Therapy in a selected setting, which is an objective and physical indicator and mood inventory; it measures mood changes, as the subjective and physiological indicators. It was indicated that Music Therapy in hospice setting reduces depression of patients and therapy plays a possible role in improving patient's quality of life. This study measured with 10 hospices in patients. Individual interviews according to mood inventory, were conducted before and after a small group session.

Wibke Grob (2010) conducted observational study to determine effects of music therapy in the treatment of 18 children with delayed speech development.

It revealed that music have a measurable effect on the speech development, including the ability to form and maintain relationship as well as their cognitive structure, action patterns and level of intelligence.

Studies Related to Effectiveness of Music Therapy on Depression among Clients on hemodialysis.

“The spirit of begins to enjoy the music of the blessed ones, when he hears the unison, that reminds him of his origin and of the beauty., for which he is hoping and waiting”

-Marin Mersenne (Music Theoretician)

Silverman M J (2003) analyzed the existing quantitative research evaluating the influence of classical ragas of Hindola, Mohana and Kalyani upon the symptoms of depression by a meta-analysis on 19 studies. Results indicated that ragas has proven to be significantly effective in suppressing and combating the symptoms of depression ($d=+0.71$). This supports the therapeutic potential of ragas. Researchers also recommended and strongly warranted to refine unique aspects of music therapy interventions effective for those with depressive symptoms. Finally, the researchers recommended that the new music therapy technique is simple to implement and can easily be integrated in a multidisciplinary programme for the management of depression on clients on Hemodialysis.

Guétin (2009) organized a single-centre, comparative, controlled, randomised study, with blinded assessment of its results by 2 weeks of study. The treatment group that comprised 15 samples was provided with selected ragas to identify the effects of the same. The study findings found improvements in depression at $p < 0.01$.

Mohammadi E (2009) conducted a case-control study to examine the effect of classical ragas of Hindola, Mohana and Kalyani heard for 20 minutes on the level of depression experienced by patients receiving hemodialysis as measured by the Becks Depression Scale. Analyzing the differences in the pre- and post-intervention scores demonstrated a significant decreases in mean scores of depression ($P = 0.02$) in the intervention group compared to the control group of simple bed rest.

Erikkila J et al (2011) determined the efficacy of Ragas such as Hindolo, Mohana, Kalyani raga, Sindubhairavi and Karakarapriya added to standard care compared with standard care only in the treatment of depression among hemodialysis patients ($n=79$) through a randomized clinical trial. The total duration of the study was for 14 days with the exposure to the ragas of Hindolo, Mohana, Kalyani raga, Sindubhairavi and Karakarapriya for 20 minutes per day. Results of the study revealed that, participants receiving music therapy plus standard care shown greater improvement than those receiving standard care in depression symptoms (mean difference 4.65, 95% CI 0.59 to 8.70) and general functioning (-4.58, 95% CI -8.93 to -0.24). Moreover, the response rate was significantly higher for the music therapy plus standard care group than for the standard care only group. Thus, the researchers finally concluded that ragas as music therapy combined with standard care are effective for decreasing the level of depression among hemodialysis patients.

Dr.Sucheta Kakshit et al (2010) conducted a randomized controlled trial to determine the effect of Hindola, Mohana, Kalyani and Sindhubhairavi on depression among 42 hemodialysis patients at a time period of 12 days in Korea. The study

findings at the end of 12th day revealed that the experimental group had statistically significant reduction in depression secondary to the effect of ragas.

Cooke et al (2010) conducted a randomized controlled trial investigating the effect of Sindubhairavi, Hindola, Kalyaniraga and Mohana music on quality of life and depression in 47 sample on hemodialysis using the Quality of Life scale and Beck's depression Scale. Data analysis revealed that participants with scores that were suggestive of increased depressive symptoms had fewer depressive symptoms over time. Thus it was finally concluded that music therapy using the ragas were beneficial in reducing depression among hemodialysis patients.

Shabanloei (2010) conducted a study to quantify and evaluate the effectiveness of music therapy of Indian classical Ragas interventions on depression control for 100 hemodialysis patients at the Tabriz Hematology and Nephrology Center in Iran. Participants in the study were randomly assigned to one of two groups: one group listened to music during the procedure, and the other did not. Patients completed the depression Inventory both before and after the procedure. Results showed that participants who listened to music had lower depression levels than those who did not listen to it.

Maratos A, Crawford M.J and Procter.S (2011) examined possible mechanisms of action of complex intervention- classical music and suggested that it is effective because active music-making within the therapeutic frame offers the patient opportunities for new aesthetic, physical and relational experiences that decrease the depressive symptoms.

Prakash Khaitan et al (2011) explored the effects of music therapy (classical Indian music like Hindola, Sindhubhairavi and Mohana) in reducing depression on patients on hemodialysis. This randomized controlled trial was conducted at the Nephro Department Center, First Affiliated Hospital of Xi'an Jiaotong University from March to November 2009. A total of 120 hemodialysis patients were randomly allocated to two groups, an intervention group and a control group (60 patients in each group). Depression scores at the end of 10th, 12th and 14th days identified a statistically significant results compared with the control group with a mean difference (95%) of -2.38 (-2.80, -1.95), -2.41 (-2.85, -1.96), and -1.87 (-2.33, -1.42). Thus the findings of the study provided some evidence that music therapy has both short- and long-term positive effects on alleviating depression in hemodialysis patients.

CONCEPTUAL FRAME WORK

IMOGENE KING'S GOAL ATTAINMENT THEORY

According to Nancy Burns, (2001) conceptual framework is a set of interrelated concepts that symbolically represent and convey a mental image of a phenomenon. .Conceptual frame for the study was based on King's original ideas to incorporate the concept the nurse and the patient mutually communicating formation, establishing goals.

The investigator selected the conceptual framework for the present study was based on King's Goal Attainment Model (1981).This theory based on concepts of personal, interpersonal and social system including perception, judgement, action, reaction and transaction.

Perception

According to Imogen King ,perception means the study assumes that there is interpersonal relationship between the investigator and participants. In this present study perception refers to the investigator perceived that depression among clients on hemodialysis.On the other hand subjects perceives the depression due to the hemodialysis.

Judgment

According to Imogen King's Imogen analyzing the area of activity which is carried out in the study. In present study investigator who judge the identify the, level

of depression (mild, borderline and moderate). On other hand subjects judge a need to reducing the level of depression that would reduce the perceived level of depression.

Action

According to King's Imogen the individual expect the perceived energy as demonstrated by observable behavior by taking mental or physical action. In the present study action refers to plan to reduce the level of depression through the intervention on Music Therapy. Following judgment the subjects accepts to listen the music.

Reaction

According to King's Imogen reaction means developing action and acting on perceived a choice for goal attainment. In the present study investigator to the action of administering Music Therapy for 20 minutes for 14 days ,and subjects which will lead to participating in Music Therapy for 20 minutes for 14 days.

Transaction

According to Imogen King, Transaction is the process where the individual naturally identify goals, and means to achieve them. The reach an agreement about how to attain these goal and then set about to realize them. In this present study transaction identifies to assess the perceived level of depression by using the Modified Beck's Depression scale after administering the Music Therapy.

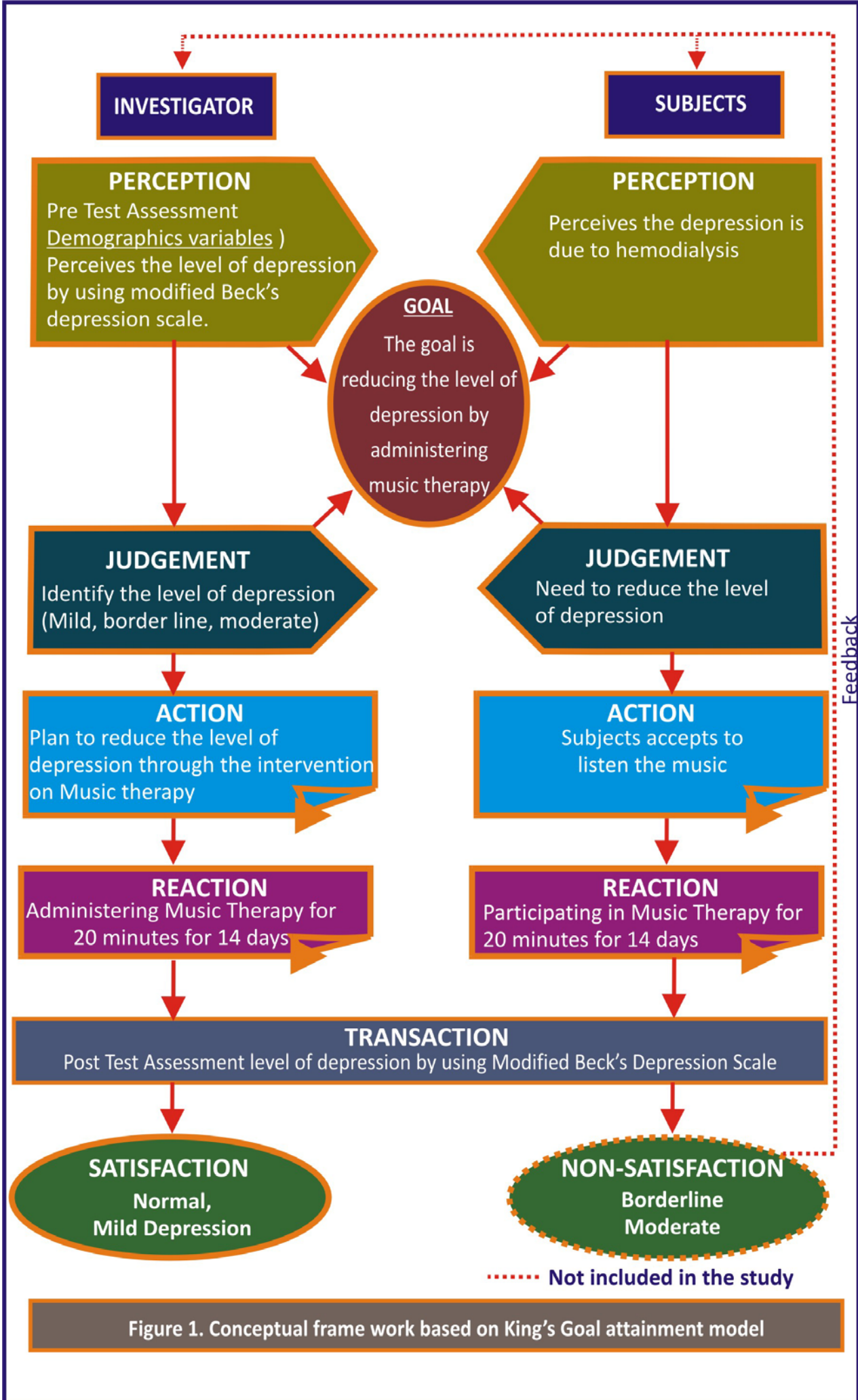


Figure 1. Conceptual frame work based on King's Goal attainment model

METHODOLOGY

CHAPTER III

METHODOLOGY

Methodology deals with the research approach , research design , setting of the study, population, criteria for selection of sample, sample size, sampling technique, description of tool, scoringprocedure, pilotstudy, data analysis, and protection of human rights.

According to Polit and Hungler, research methodology refers to the investigatorways of obtaining, organizing and analyzing data.

Research Approach

Polit and Hungler, (2004) defined the research approach as “a general set of orderly discipline procedure used acquire information”.

A quantitative evaluative approach was used to determine the effectiveness of Music Therapy on depression among clients on hemodialysis.

Research Design

Polit and Hungler (2005) define research design as “a investigator’s overall plan for obtaining answers to the research questions or for testing the research hypothesis is referred to as the research design”.

A pre experimental one group pretest posttest design was chosen for this study to analyze the effectiveness of Music Therapy reducing depression among clients on hemodialysis. Assessment was made before and after intervention (Music Therapy) with “Beck’s Depression inventory scale”.

A preexperimental (one group pretest posttest design) design was chosen for this study to analysis the effectiveness of Music Therapy in reducing level of depression among clients on hemodialysis.

The diagrammatic representation of research design as follows

Pretest(I day)	Intervention(2-15 th)	Posttest 16 th day
O ₁	X	O ₂

Key

O₁ : Pre-test assessment of level of depression in study group on 1st day.

O₂ : Post-test assessment of depression in study group(16th day).

X : Music Therapy (2nd-15th days) for 20minuts for 14 consecutive days.

O₂-O₁ : Effectiveness of Music Therapy

Variables

A variable is “An attribute of a person or object that varies that is taken on different values.” A Variable is any phenomenon or characteristic or attributes that change. Variable are measurable characteristic of a concept and consist of logical group of attributes.

In present study the variables are:

Dependent variable : Depression among clients on Hemodialysis.

Independent variable : Music Therapy

Extraneous variables : Age, Gender, marital status,
Type of family, education, occupation, income,
frequency of dialysis, sleeping pattern, duration
of illness, duration of dialysis, Type of vascular
access, other use of Complementarytherapies.

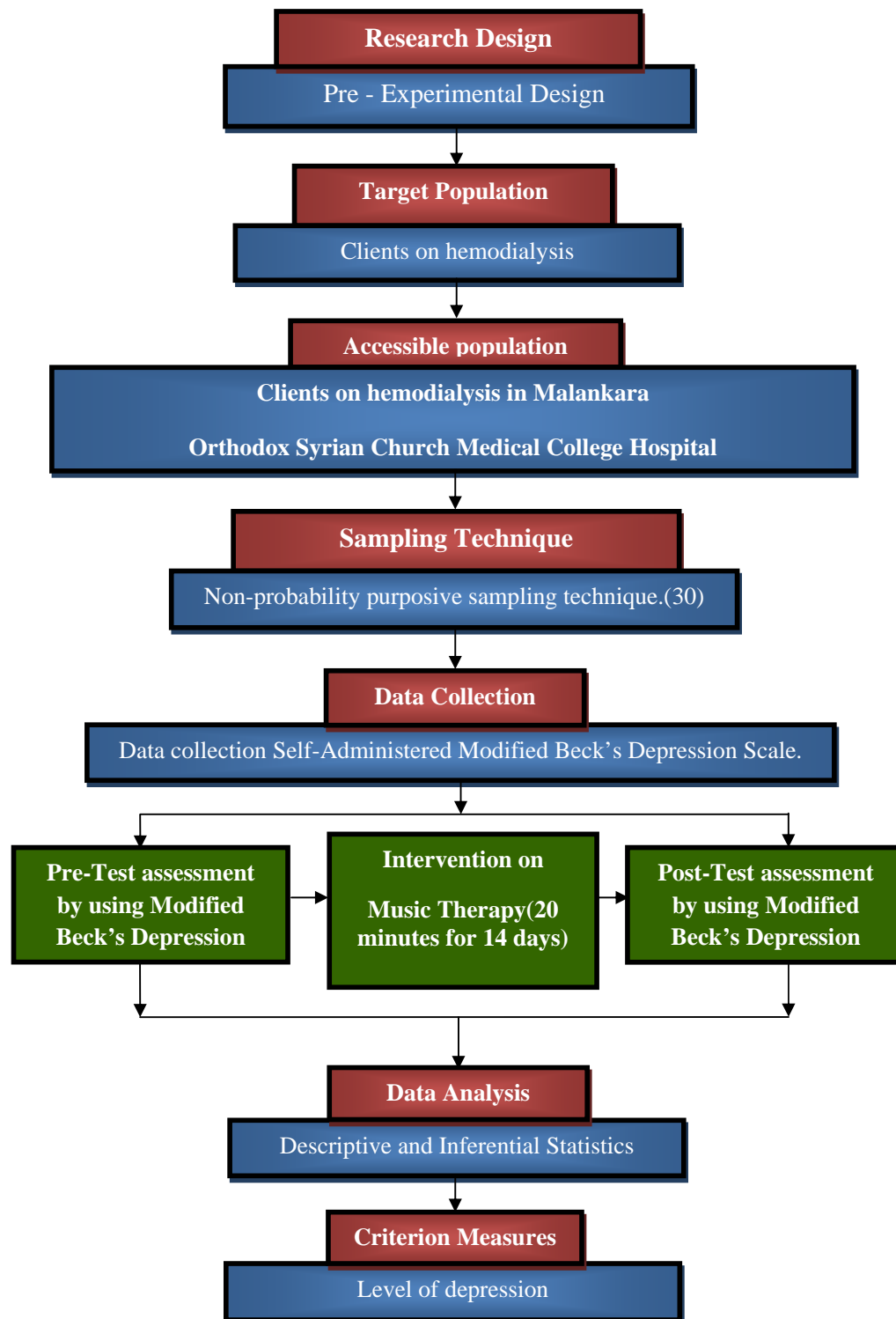


Figure 2: The Schematic Representation of Research Methodology

Setting of the Study

The study was conducted in Malankara Orthodox Syrian Church Medical College Hospital Kolenchery at Ernakulum District in Kerala.. The total strength is 1050beded hospital. Every day approximately 8-10 subjects admitted for hemodialysis. In the outpatient and inpatient department of nephrology, 800 and 200 cases respectively registered monthly. There are 3 nephrologists present in MOSC Hospital.

Population

According to Polit and Hungler (2005) “A population is the entire aggregation of cases in which a investigator is interested”.

The target population is the aggregation of cases about which the researcher would like to make generalization. An accessible population is the section of the target population for this study is clients on hemodialysis .The accessible population for this study includes clients on hemodialysis in Malankara Orthodox Syrian Church Medical College Hospital at Kerala. Approximately daily 8-10 clients admitted for hemodialysis in this hospital. Last month totally 125 clients were admitted for hemodialysis.

Sample

Sampling is defined as the selection of some part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made. In other words it is the process of obtaining information about the entire population by

examining only a part of it. The sample size was 30; the sample was selected from Malankara Orthodox Syrian Church Medical College Hospital at Kerala.

Criteria for sample selection

Inclusion Criteria

- Clients who are admitted with renal failure and on dialysis.
- Clients who are all having the symptoms of sadness, loss of interest, changes of sleeping pattern, worthlessness.
- Clients between the age groups of 20- 80.
- Irrespective of sex.
- Clients who can read either English or Malayalam or Tamil.

Exclusion criteria

- Clients with sensory deficits
- Clients who are taking antidepressants
- Clients who are illiterates.
- Clients who have severe depression.

Sampling Technique

Sampling technique is the process of selecting a portion of the population to represent to the entire population.

In this present study sampling technique adopted was non probability purposive sampling technique. The investigator finds out the sample through

admission register. The total sample size was 30 clients on hemodialysis. The 30 samples were selected based on inclusion criteria and those who have scored 4 in checklist to assess the depression.

Description of the Tool

Modified “Beck’s Depression inventory scale” was used to assess the level of depression.

The tool consisted two parts.

Part: I

It consisted of demographic variables of clients on hemodialysis. It consists of item which include Age, Gender, Marital status, Type of Family, Education, Occupation, Income, Frequency of dialysis, Sleeping pattern, Duration of illness, Duration of dialysis, Type of vascular access, Use of other complementary therapies.

Part: II

This consisted of Modified Beck’s depression inventory to assess the level of depression. The modified Beck’s depression inventory consists of 21 items to assess the level of depression.

Scoring Procedure

Part : II

Regarding Modified Beck’s depression scale, it consists of 21 items assessing the depression level. Each item consists of 0-3 scores. The highest possible total for the whole test is sixty-three; this means you circled the option (d) three on all twenty-one

items. Since the lowest possible score for each question is zero, the lowest possible score for the test is zero.

The scores were classified as following

Normal	: 0-10 (15%)
Mild depression	: 11-16 (25%)
Borderline clinical depression	: 17-20 (31%)
Moderate Depression	: 21-30 (47%)
Severe depression	: 31-40 (63%)
Extreme depression	: Over 40 (65%)

Intervention on Music Therapy

Before administering the Music Therapy the investigator got the consent form from the subjects and informed regarding Music Therapy and its benefits on depression. After that the subjects listened to music using the walkman for a period of 20 minutes continuously for 14 days.

Validity and Reliability

Validity

According to Burns and Grove, (2005) “The totality of an instrument is the determination of the extent to which the instrument reflects the abstract constant that is being examined”.

Five experts in nursing and two experts in medicine evaluated the content validity of the instruments. Nursing experts were from medical surgical nursing and

medical experts were from medical and nephrology department. According to their suggestion investigator modified the 9th item of Beck's depression scale and added 4 demographic variables.

Reliability

Brink (1985) stated that reliability refers to the consistency, stability and reliability of a data collection instrument.

Reliability was established through Cohen's Kappa's method. The tool was administered to 5 representing the characteristics of the population. In that 17 were found to be perfect agreement, 2 were found to be moderate agreement and 2 were found to be substantial agreement.

Pilot Study

Polite and Beck, (2004) denotes that "Pilot Study is a small –scale version or trial run done in preparation of a major study". The purpose of the study was to find out the feasibility of the study

The investigator conducted a pilot study among ten subjects with depression on hemodialysis in SPT Hospital at Coimbatore, after obtaining written consent. The data collection procedure was done for 16 days in SPT hospital at Coimbatore. 10 sample were selected by using non-probability purposive sampling technique. The subjects were informed by the nature and purpose of the study. After getting the written consent form, Beck's Depression scale was used to assess the level of depression. On second day Music Therapy was given to subjects for about 20 minutes for 14 days.

After that on the 16th day posttest was done by using the Beck's depression scale. The mean difference was 6.8 and standard deviation was 3.1. The effectiveness of music therapy in reducing level of depression was found by using 't' value of 5.6 significant at 0.05 level. It was found to be feasible. The pilot study result showed that settings, samples, and tool was feasible to enough to conduct the main study.

Data Collection Procedure

The data collection procedure was done for 6 weeks in nephrology ward of Malankara Orthodox Syrian Church Medical College Hospital in Kerala. Permission to conduct the study was obtained from the Administrative Director of the hospital, Head of the department and unit in-charge of nephrology ward. 30 sample on hemodialysis were selected for the study by using non probability purposive sampling technique. The subjects were informed by the nature and purpose of the study. Written consent was obtained as per rule on the first day and pre-test was conducted by using Beck's depression scale. On second day Music Therapy was given to subjects for about 20 minutes once a day for 14 consecutive days. After that on the 16th day posttest was done by using the Beck's depression scale. Approximately 6-8 subjects were taken per day.

Plan for Data Analysis

The demographic variables were analyzed by using descriptive statistics (frequency and percentage). The level of depression was analyzed by using descriptive statistics (mean, standard deviation). The effectiveness of Music Therapy on depression was analyzed by using inferential statistics (Paired 't' test). Association

between the levels of depression among clients on hemodialysis with their selected demographic variables was analyzed by using chi –square.

Protection of Human Rights

The study is conducted after the approval research committee of the college. Permission was obtained from the hospital. The nature and purpose of this study explained to the health care personnel involved. Written consent was obtained from all the study participants. Confidentiality and anonymity was maintained throughout the study.

*DATA ANALYSIS AND
INTERPRETATION*

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

The chapter deals with analysis and interpretation on data collected from 30 clients with depression on to evaluate the effectiveness on Music Therapy on depression. The purpose on the analysis was to reduce the data to an intelligible and interpretable form, so that the relation on the research problem can be studied and tested.

Polit and Beck, (2003) has noted data analysis as the systematic organization, synthesis on research data and testing on research hypothesis using those data.

This chapter deals with the analysis and interpretation on data collected with the objectives stated for this study. The analysis and interpretation on this study was based on the data collected through self administered questionnaire. The results were computed by using descriptive and inferential statistics.

The study findings are presented in sections as follows:

- Section I : Data on demographic variables on clients on hemodialysis with depression.
- Section II : Data on assessment of depression among clients on hemodialysis.
- Section III : Data on Effectiveness on Music Therapy on level of depression among Clients on hemodialysis.
- Section IV : Data on association between level of depression among clients on hemodialysis with their Selected Demographic Variables.

SECTION I: DATA ON DEMOGRAPHIC VARIABLES ON CLIENTS
ON HEMODIALYSIS WITH DEPRESSION.

Table: 1

Frequency and Percentage Distribution of Clients on Hemodialysis in Relation to their
Demographic Variables.

N=30			
S.No	Demographic Variables	Frequency f	Percentage %
1	Age(in years)		
	a) 20-40	6	20
	b) 41-60	12	40
	c) 60-80	12	40
2	Gender		
	a) Male	15	50
	b) Female	15	50
3	Marital Status		
	a) Married	19	63
	b) Widow/Widower	6	20
	c) Divorced	-	-
	d) Separated	2	7
	e) Single	3	10

Cont...

S.No	Demographic Variables	Frequency f	Percentage %
4	Type of family		
	a) Nuclear family	23	77
	b) Joint family	7	23
5	Education		
	a) Primary education	3	10
	b) Secondary education	12	40
	c) Higher secondary	11	37
	d) Degree/ Equality	4	13
6	Occupation		
	a) Government employee	6	20
	b) Private employee	12	40
	c) Self-employee	7	23
	d) Unemployment	5	17
	e) Retired	-	
7	Income		
	a) <3000	9	30
	b) 3000-5000	15	50
	c) >5000	6	20

S.No	Demographic Variables	Frequency f	Percentage %
8	Frequency on dialysis		
	a) Once a week	3	10
	b) Twice a week	20	67
	c) Thrice a week	7	23
9	Sleeping Pattern		
	a) Less than 3 hours	12	40
	b) 3-6 hours	16	53
	c) More than 6 hours	2	7
10	Duration of illness		
	a) Less than 3 years	6	20
	b) 3-6 years	22	73
	c) More than 6 years	2	7
11	Duration of dialysis		
	a) 1-2 hours	-	-
	b) 2-3 hours	7	23
	c) 3-4 hours	18	60
	d) Above 4 hours	5	17

Cont...

S.No	Demographic Variables	Frequency f	Percentage %
12	Type of vascular access		
	a) AV Fistula	24	80
	b) Graft	-	-
	c) Shunt	-	-
	d) Jugular Catheter	3	10
	e) Femoral Catheter	3	10
13	Are you practicing any other complementary therapy		
	a) Yes	7	24
	b) No	23	76
	If yes		
	a) Aromatherapy		
	b) Yoga	7	24
	c) Laughter therapy		

Table 1; reveals that regarding age, majority on the clients with depression on hemodialysis 12(40%) belonged to age group on 41-60 years and above 60. 6(20%) belonged to 20-40 years.

Regarding Gender, it was equally distributed as 15 (50%) were males and 15(50%) were females.

Regarding Marital Status, majority on clients with depression on hemodialysis 19(63%) were married, 6(20%) were widow/widower, 2(7%) were separated, 3(10%) were single, and none of them were divorced.

Regarding type of family, majority on clients with depression on hemodialysis 23(77%) belongs to nuclear family, 7(23%) belongs to joint family.

Regarding education status, majority on clients with depression on hemodialysis 12 (40%) have studied up to secondary, 3(10 %) have studied up to primary 12 (40%), 11(37%) have studied up to higher secondary, 4(13%) were degree holder.

Regarding occupation, majority on clients with depression hemodialysis 12 (40%) were private employees, 6(20%) were government employees, 7(23%) were in self-employees, 5(17%) were unemployed.

Regarding Income, majority on clients with depression on hemodialysis 15 (50%) earned about Rs.3000-5000/month, 9(30%) earned about Rs. <3000/month, 6(20%) earned about Rs.>5000/month.

Regarding frequency on dialysis, majority on clients with depression on hemodialysis 20 (67%) underwent twice a week, 3(10%) underwent once a week, 7(23%) underwent thrice a week.

Regarding sleeping pattern, majority on clients with depression on hemodialysis 16 (53%) slept between 3-6hrs, 12(40%) slept less than 3 hrs, 2(7%) slept more than 6 hrs/day.

Regarding Duration of illness, majority on clients with depression on hemodialysis 22 (73%) suffered between 3-6 years 6(20%) suffered less than 3 years, 2(7%) suffered more than 6 years.

Regarding Duration of dialysis, majority on clients with depression on hemodialysis 18(60%) were 3-4hrs, 7(23%) were 2-3hrs, 5(17%) were above 4 hours.

Regarding type of vascular access majority on clients with depression on hemodialysis 24(80%) had AV fistula, 3(10) % had a jugular catheter, 3(10%) had a femoral catheter. There were no subjects with either (or) shunt and graft.

Regarding using other complementary therapies, 7(24%) had yoga as a complementary therapy in their day to day life.

SECTION II: DATA ON ASSESSMENT OF DEPRESSION AMONG CLIENTS ON HEMODIALYSIS.

Table: 2

Frequency and Percentage Distribution on Level of Depression in Pre test among
Clients on Hemodialysis.

N = 30

Sl no:	Level of Depression	Classification of Respondents	
		f	%
1	Normal	0	0
2	Mild	9	30
3	Borderline	12	40
4	Moderate	9	30

The table 2.1: shows that out on 30 subject, majority on them 12(40%) had borderline level of depression and 9(30%) had moderate and mild level of depression respectively in pretest.

It was inferred that in pre-test most on the depressive clients had borderline level of depression.

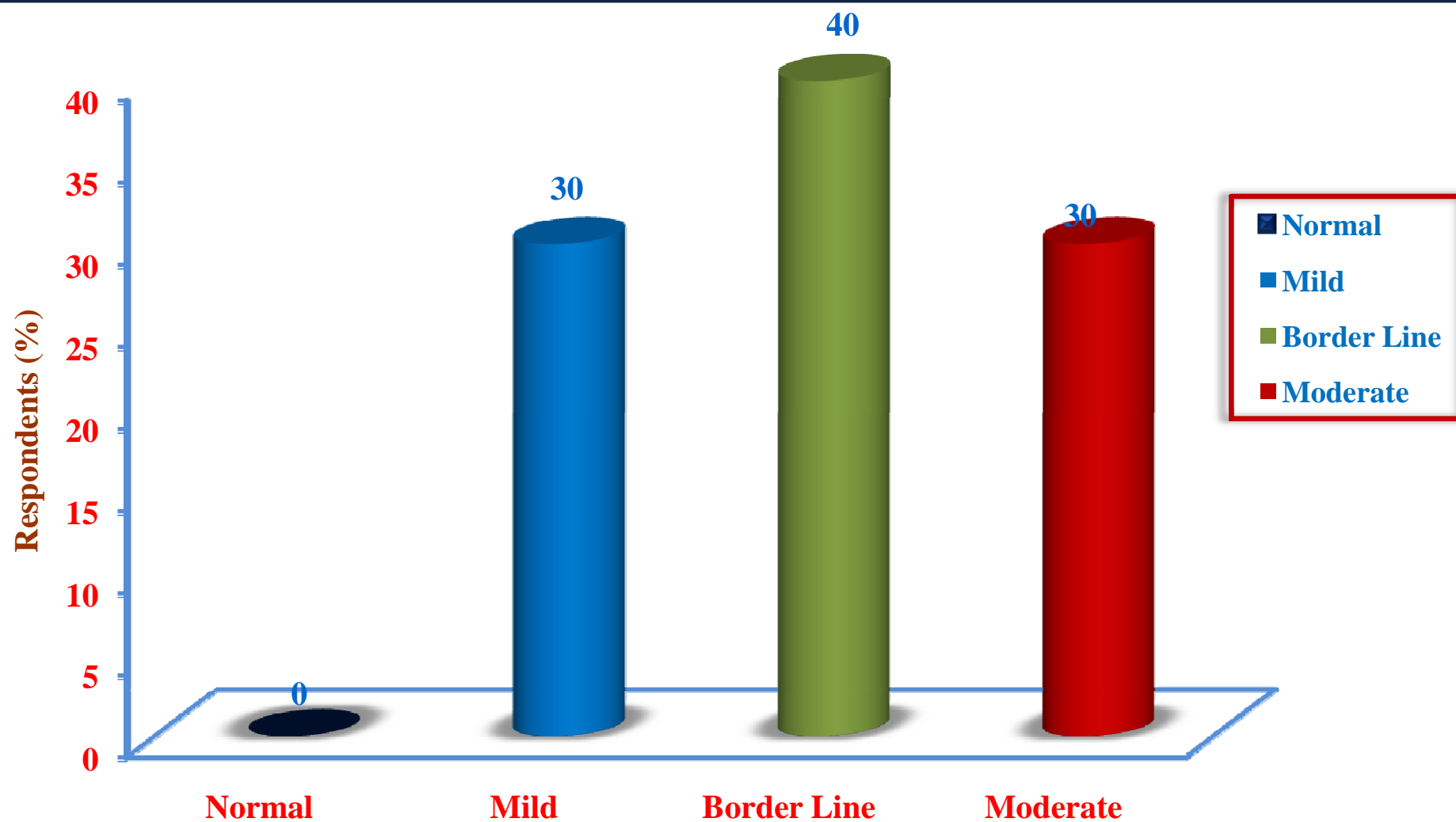


Figure 3. Percentage Distribution Pre test Level of depression among clients on Hemodialysis

SECTION III: DATA ON ENNECTIVENESS ON MUSIC THERAPY ON
LEVEL OF DEPRESSION AMONG CLIENTS ON
HEMODIALYSIS

Table: 3.1

Frequency and Percentage Distribution of Pretest Post test Level of Depression
among Clients on Hemodialysis.

N=30

Sl no:	Level of Depression	Classification of Respondents			
		Pre test		Post test	
		f	%	f	%
1	Normal	0	0	13	43
2	Mild	9	30	16	54
3	Borderline	12	40	1	3
4	Moderate	9	30	0	0

The table 2.2: shows that out on 30 subject, majority on them 12(40%) had borderline level of depression and 9(30%) had moderate and mild level of depression respectively in pretest. In posttest 13(43%) on them normal, 16(54%) on them had mild level of depression, 1(3%) on them had borderline level of depression and none on them had moderate level of depression.

It was inferred that, most on the depressive clients had borderline level of depression in pre-test and most on the borderline depressive clients had normal in post test.

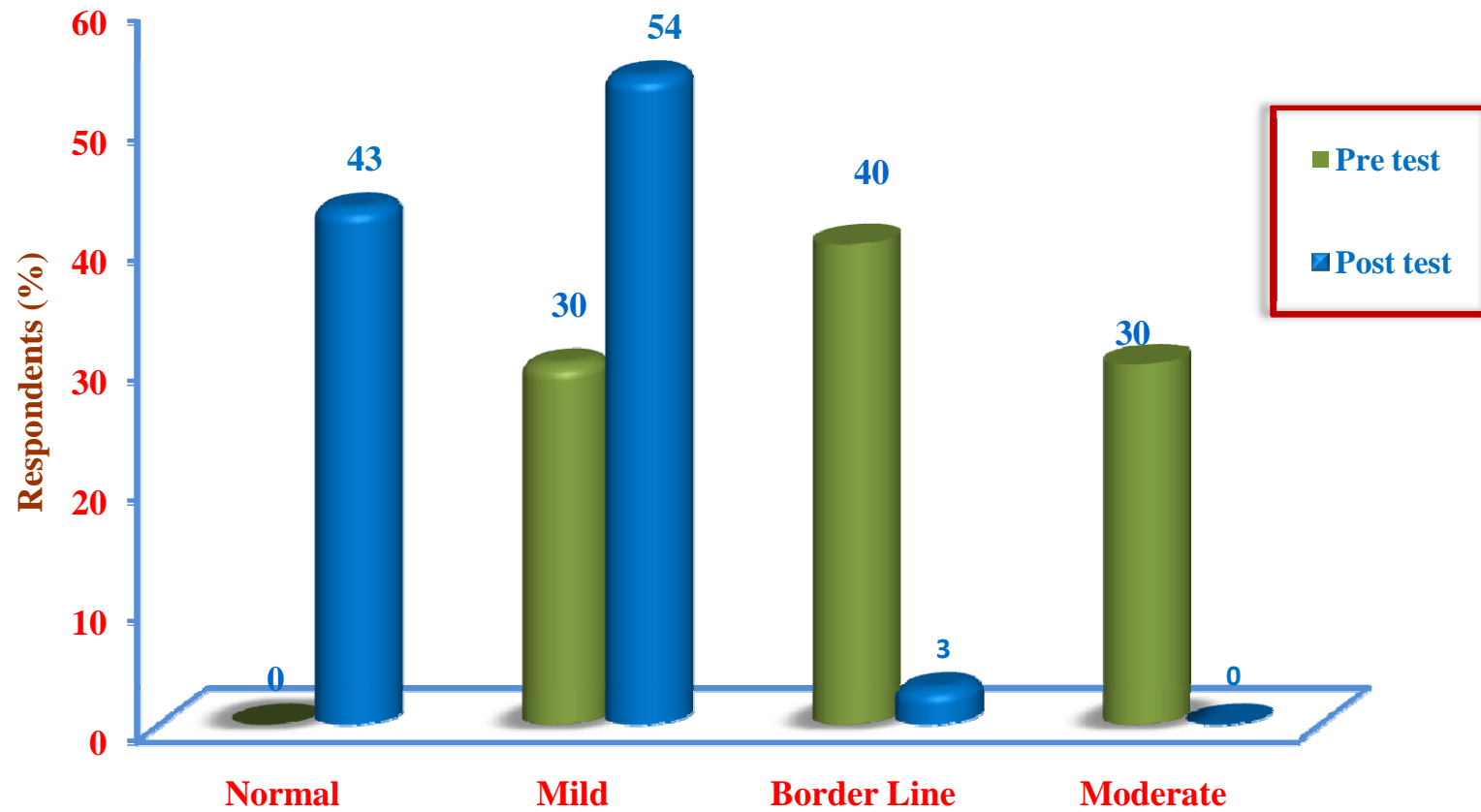


Figure 4 Percentage Distribution of Pre test and Post test Level of depression among clients on Hemodialysis

Table: 3.2

Mean, Standard deviation, Mean Difference and 't' Value on Pre-test and Post-test

Level of depression among Clients on Hemodialysis.

N = 30

S. No	Aspects	Mean	SD	MD	't' value
1	Pre test	18.8	3.43	7.6	12.72***
2	Post test	11.2	2.03		

***Significant at $p < 0.05$ level.

Table: 3 reveals that among clients with depressive on hemodialysis, the mean pretest score 18.8 with standard deviation 3.43 was more than the mean post test score 11.2 with standard deviation 2.03. The calculated mean difference was 7.6. The obtained 't' value 12.72 was highly significant at $p < 0.05$ level. Hence the stated hypothesis H_1 was accepted.

H_1 : There will be a significant difference between the mean pre and post test on the level of depression among clients on hemodialysis.

It was inferred that Music Therapy was effective in reducing level of depression among clients on hemodialysis.

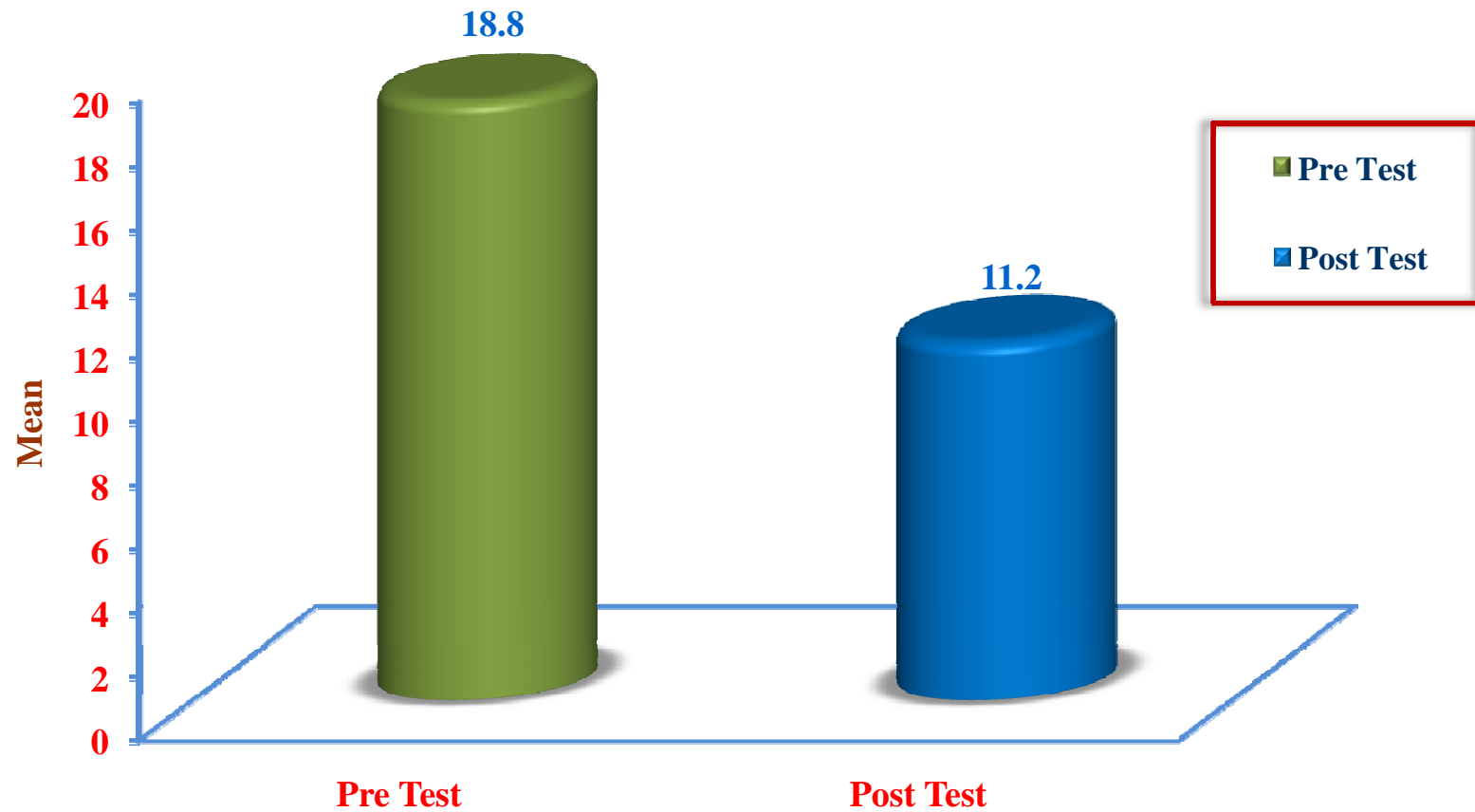


Figure 5. Mean value of Pre-test and Post-test of Depression Among Clients on Hemodialysis

SECTION IV: DATA ON ASSOCIATION BETWEEN LEVEL OF DEPRESSION
AMONG CLIENTS ON HEMODIALYSIS WITH THEIR
SELECTED DEMOGRAPHIC VARIABLES.

Table.4.1

Frequency, Percentage Distribution and χ^2 Value on Pre-test Level of Depression
among Clients on Hemodialysis with their Selected Demographic Variables.

N=30

S. NO	Demographic Variables	Mild		Borderline		Moderate		Chi square χ^2
		f	%	f	%	f	%	
1	Age(in years)							
	a)20-40	2	7	3	10	1	3	
	b)41-60	6	20	3	10	3	10	5.6
	c) Above 60	1	3	6	20	5	17	df=4
2	Gender							
	a) Male	5	17	7	23	3	10	1.87
	b) Female	4	13	5	17	6	20	df=2
3	Marital Status							
	a) Married	7	23	7	27	5	17	
	b) Widow/Widower	1	3	3	10	2	7	7.3
	c) Divorced	-	-	-	-	-	-	df = 2
	d) Separated	-	-	2	7	-	-	
	e) Single	1	3	-	-	2	7	
4	Type of family							
	a) Nuclear family	9	30	8	27	6	20	3.8
	b) Joint Family	-	-	4	13	3	10	df=2

S. NO	Demographic Variables	Mild		Borderline		Moderate		Chi square χ^2
		f	%	f	%	f	%	
5	Education							
	a) Primary	1	3	2	7	-	-	13.28* df=6
	b) Secondary	2	7	6	20	4	13	
	c) Higher Secondary	2	7	4	13	5	17	
	d) Degree/Equality	4	13	-	-	-	-	
6	Occupation							
	a)Government Employee	2	7	2	7	2	7	1.67 df=8
	b)Private Employee	5	17	4	13	3	10	
	c)Self Employee	1	3	3	10	3	10	
	d)Unemployed	1	3	3	10	1	3	
	e)Retired	-	-	-	-	-	-	
7	Income							
	a)Below 3000	1	3	3	10	5	17	3.5 df=4
	b)3000-5000	6	20	6	20	3	10	
	c)5000 above	2	7	3	30	1	3	
8	Frequency on dialysis							
	a)Once in week	-	-	1	3	2	7	3.8 df=4
	b)Twice in week	7	23	9	30	4	13	
	c)Thrice in week	2	7	2	7	3	10	

S. NO	Demographic Variables	Mild		Borderline		Moderate		Chi square χ^2
		f	%	f	%	f	%	
9	Sleeping Pattern							
	a)Less than 3hrs	3	10	6	20	3	10	
	b)3-6 hours	5	17	5	17	6	20	2.1
	c)More than 6 hours	1	3	1	3	-	-	df=4
10	Duration of illness							
	a)Less than 3 years	2	7	1	3	3	10	4.2
	b)3-6 years	6	20	11	37	5	17	df=9.4
	c)More than6 years	1	3	-	-	1	3	
11	Duration of dialysis							
	a)1-2 hours	-	-	-		-	-	
	b)2-3 hours	3	10	2	7	2	7	2.7
	c)3-4 hours	4	13	7	23	7	23	df=6
	d)Above 4 hours	2	7	3	10	-	-	
12	Type of vascular access							
	a)AV fistula	4	13	11	37	9	30	
	b)Graft	-	-	-	-	-	-	11.23*
	c)Shunt	-	-	-	-	-	-	df=8
	d)Jugular Catheter	2	7	1	3	-	-	
	e)Femoral Catheter	3	10	-	-	-	-	

S. NO	Demographic Variables	Mild		Borderline		Moderate		Chi square χ^2
		f	%	f	%	f	%	
13	Are you practicing other complementary therapies?							
	a)Yes	1	3	3	10	3	10	1.24
	b)No	8	27	9	30	6	20	df=2
	In yes							
	a)Aromatherapy	-	-	-	-	-	-	
	b)Yoga	1	3	3	10	3	10	
	c) Laughter therapy	-	-	-	-	-	-	

* = Significant at $p < 0.05$ level df = degree on freedom

Table 4.1; shows the substantive summary on Chi-Square analysis, which was used to bring out the relationship between the depression with their demographic variables.

It reveals that, among the age group on 20- 40 years, 2(7%) had mild level of depression, 3(10%) had borderline level of depression and 1(3%) moderate level of depression. Among 41-60 years, 6(20%) had mild level of depression, 3(10%) had borderline level of depression and 3 (10%) had moderate level of depression. Among above 60years 1(3%) had mild level of depression, 6(20%) had borderline depression and 5(17%) had moderate level of depression. The obtained chi-square value 5.6 was not significant. Hence stated hypothesis H_2 (There will be a significant association between levels of depression among clients on hemodialysis with their selected

demographic variables) was not supported. There was no significant association between levels of depression among clients on hemodialysis with age.

It also revealed that with regard to gender, among male, 5(17%) had mild level of depression, 7(23%) had borderline level of depression and 3(10%) had moderate level of depression. Among females, 4(13%) had mild level of depression, 5(17%) had borderline depression and 6(20%) had moderate level of depression. The obtained chi-square value 1.8 was not significant. Hence stated hypothesis (H_2) was not supported. So there is no significant association between level of depression among clients on hemodialysis with gender.

With regard to marital status, among married 7(23%) had mild level of depression, 7(23%) had borderline level of depression and 5(17%) had moderate level of depression. Among widow/widower, 1(3%) had mild level of depression, 3(10%) had borderline level of depression and 2(7%) had moderate level of depression. Among separated 2(7%) had borderline level of depression. Among single, 1(3%) had mild level of depression and 2(7%) had borderline level of depression and 2(7%) had moderate level of depression. The obtained chi-square value 7.3 was not significant. Hence stated hypothesis (H_2) was not supported. There was not significant association between level of depression among clients on hemodialysis with marital status.

It revealed that, with regard to type of family, among nuclear family, 9(30%) had mild level of depression, 8(27%) had borderline level of depression, and 6(20%) had moderate level of depression, Among joint family, 4(13%) had borderline level of depression, and 3(10%) had moderate level of depression. The obtained chi-square value 3.8 was not significant. Hence stated hypothesis (H_2) was not supported. There

was no significant association between level of depression among clients on hemodialysis with type of family.

It also revealed that, with regard to education, among primary, 1(3%) had mild level of depression, 2(7%) had borderline level of depression. Among secondary 2(7%) had mild level of depression, 6(20%) had borderline level of depression and 4(13%) had moderate level of depression. Among Higher secondary, 2(7%) had mild level of depression, 4(13%) had borderline level of depression and 5(17%) had moderate level of depression. Among degree 4(13%) had mild level of depression. The obtained chi-square value 13.28 is significant. Hence stated hypothesis (H_2) was supported. So there is a significant association between level of depression among clients on hemodialysis with education.

With regard to occupation, among government employee, 2(7%) had mild level of depression, 2(7%) had borderline level of depression and 2(7%) had moderate level of depression. Among private employee, 5(17%) had mild level of depression, 4(13%) had borderline level of depression and 3(10%) had moderate level of depression. Among self employee, 1(3%) had mild level of depression, 3(10%) had borderline level of depression, 3(10%) had moderate level of depression. Among unemployed, 1(3%) had mild level of depression, 3(10%) had borderline level of depression and 3(10%) had moderate level of depression. The obtained chi-square value 1.67 was not significant. Hence stated hypothesis (H_2) was not supported. There is no significant association between level of depression among clients on hemodialysis with occupation.

It reveals to income, among below Rs.3000/-, 1(3%) had mild level of depression. 3(10%) had borderline level of depression and 5(17%) had moderate level of depression. Among Rs3000/-5000/, 6(20%) had mild level of depression, 6(20%) had borderline depression and 3(10%) had moderate level of depression. Among above Rs5000/-, 2(7%) had mild level of depression, 3(10%) had borderline depression and 1(3%) had moderate level of depression. The obtained chi-square value 3.5 was not significant. Hence stated hypothesis (H_2) was not supported. There was no significant association between level of depression among clients on hemodialysis with income.

With regards to frequency on dialysis, among once in week 1(3%) had borderline depression and 2(7%) had moderate level of depression. Among twice in week, 7(23%) had mild level of depression, 9(30%) had borderline level of depression and 4(13%) had moderate level of depression. Among thrice in week, 2(7%) had mild level of depression, 2(7%) had borderline level of depression and 3(10%) had moderate level of depression. The obtained chi-square value 3.8 was not significant. Hence stated hypothesis (H_2) was not supported. There was no significant association between level of depression among clients on hemodialysis with frequency on dialysis.

It reveals that sleeping pattern, among less than 3 hours, 3(10%) had d level of depression, 6(20%) had borderline level of depression and 3(10%) had moderate level of depression. Among 3-6 hours, 5(17%) had mild level of depression, 6(20%) had borderline level of depression and 6(20%) had moderate level of depression. Among more than 6 hours, 1(3%) had mild level of depression and 1(3%) had borderline level

of depression. The obtained chi-square value 2.1 was not significant. Hence the stated hypothesis (H_2) was not supported. So there was no significant association between level of depression among clients on hemodialysis with sleeping pattern.

It reveals that duration of illness, among below 3 years, 2(7%) had mild level of depression, 1(3%) had borderline level of depression and 3(10%) had moderate level of depression. Among 3-6 years 6(20%) had mild level of depression, 11(37%) had borderline level of depression and 5(17%) had moderate level of depression. Among above 6 years, 1(3%) had mild level of depression and 1(3%) had moderate level of depression. The obtained chi-square value 4.2 was not significant. Hence stated hypothesis (H_2) was not supported. There was no significant association between level of depression among clients on hemodialysis with Duration of illness.

It also reveals that Duration of dialysis, among 2-3 hours 3(10%) had mild level of depression, 2(7%) had borderline level of depression and 2(7%) had had moderate level of depression. Among 3-4 hours, 4(13%) had mild level of depression, 7(23%) had borderline level of depression and 7(23%) had moderate level of depression. Among above 4 hrs 2 (7%) had mild level of depression, 3(10%) had borderline level of depression. The obtained chi-square value 2.7 was not significant. Hence the stated hypothesis (H_2) is not supported. There was no significant association between level of depression among clients on hemodialysis with Duration of dialysis.

It revealed that type of vascular access, among AV fistula, 4(13%) had mild level of depression, 11(37%) had borderline level of depression and 9(30%) had moderate level of depression. Among jugular catheter 2(7%) had mild level of

depression and 1(3%) had borderline level of depression. Among femoral catheter, 3(10%) had mild level of depression. The obtained chi-square value 11.23 was significant. Hence the stated hypothesis (H_2) was supported. There is significant association between level of depression among clients on hemodialysis with type of vascular access.

It reveals that practicing any complementary therapy, among yes, 1(3%) had mild level of depression, 3(10%) had borderline level of depression and 3(10%) had moderate level of depression. Among no, 8(27%) had mild level of depression, 9(30%) had borderline level of depression, 6(20%) had moderate level of depression. The obtained chi-square value 1.2 was not significant. Hence, the stated hypothesis(H_1) was not supported. There was no significant association between level of depression among clients on hemodialysis with practicing any complementary therapy.

It is interfered that there was no association for the age, gender, marital status, type of family, occupation, income, frequency on dialysis, sleeping pattern, duration of illness, duration of dialysis, modes on dialysis, practicing other complementary therapies except education and type of vascular access.

Stated hypothesis (H_2) was accepted for education, and type of vascular access but stated hypothesis was rejected for age, gender, marital status, type of family, occupation, income, frequency on dialysis, sleeping pattern, duration of illness, duration of dialysis, practicing other complementary therapies. So there is no association between level of depression among clients on hemodialysis except education and type of vascular access.

Table. 4.2

Frequency, Percentage Distribution and χ^2 Value of Post-test Level of Depression
among Clients on Hemodialysis with their Selected Demographic Variables.

N=30

S. NO	Demographic Variables	Normal		Mild		Borderline		Chi square χ^2
		f	%	f	%	f	%	
1	Age(in years)							
	a)20-40	3	10	3	10	-		
	b)41-60	5	17	5	17	2	7	5.21
	c) 60 -80	5	17	3	10	4	13	df=4
2	Gender							
	a)Male	7	23	5	17	3	10	1.61
	b)Female	9	30	3	10	3	10	df=2
3	Marital Status							
	a) Married	9	30	5	17	5	17	
	b) Widow/Widower	3	10	2	7	1	3	6.49
	c) Divorced	-	-	-	-			df = 6
	d) Separated	1	3	1	3	-	-	
	e) Single	3	10	-	-	-	-	
4	Type of family							
	a) Nuclear family	8	27	7	23	8	27	3.31
	b) Joint Family	4	13	3	10	-	-	df = 6

Cont...

Sl. NO	Demographic Variables	Normal		Mild		Borderline		Chi square χ^2
		f	%	f	%	f	%	
5	Education							
	a) Primary	3	10	-	-	-	-	9.06 df=6
	b) Secondary	8	27	2	7	2	7	
	c) Higher Secondary	3	10	2	7	6	20	
	d) Degree/Equality	2	7	2	7	-	-	
6	Occupation							
	a)Government Employee	3	10	2	7	1	3	0.73 df=6
	b)Private Employee	6	20	5	17	1	3	
	c)Self Employee	4	13	2	7	1	3	
	d)Unemployed	3	10	2	7	-	-	
7	Income							
	a)Below 3000	5	17	3	10	1	3	0.93 df=4
	b)3000-5000	9	30	4	13	2	7	
	c)5000 above	4	13	2	7	-	-	
8	Frequency on dialysis							
	a)Once a week	2	7	1	3	-	-	1.92 df=4
	b)Twice a week	10	33	5	17	5	17	
	c)Thrice a week	4	13	2	7	1	3	

Sl. NO	Demographic Variables	Normal		Mild		Borderline		Chi square χ^2
		f	%	f	%	f	%	
8	Sleeping Pattern							
	a)Less than 3hrs	2	7	2	7	2	7	
	b)3-6 hours	6	20	5	17	1	3	2.1
	c)More than 6 hours	3	10	4	13	5	17	df=4
9	Duration of illness							
	a)Less than 3 years	-	-	6	20	-	-	3.2
	b)3-6 years	5	17	15	50	2	7	df=4
	c)More than 6 years	-	-	1	3	1	3	
10	Duration of dialysis							
	a)1-2 hours	-	-	-	-	-	-	
	b)2-3 hours	5	17	1	3	1	3	1.5
	c)3-4 hours	9	30	6	20	4	13	df=4
	d) above 4 hours	3	10	2	7	-	-	
11	Type of vascular access							
	a)AV fistula	8	27	12	40	4	13	
	b) Graft	-	-	-	-	-	-	3.4
	c) Shunt	-	-	-	-	-	-	df=6
	d) Jugular Catheter	-	-	3	10	-	-	
	e)Femoral Catheter	2	7	-	-	-	-	

Sl. NO	Demographic Variables	Normal		Mild		Borderline		Chi square χ^2
		f	%	f	%	f	%	
12	Are you practicing other complementary therapies?							
	a)Yes	4	13	3	10	-	-	2.32
	b)No	9	30	8	27	6	20	df=2
	In yes							
	a) Aroma therapy	-	-	-	-	-	-	
	b) Yoga	4	13	3	10	-	-	
	c) Laughter therapy	-	-	-	-	-	-	

* = Significant at $p < 0.05$ level df = degree on freedom

Table 4.2 ; shows the substantive summary on Chi-Square analysis, which was used to bring out the relationship between the depression with their demographic variable.

It reveals that, among the age group on 20- 40 years, 3(10%) had normal, 3(10%) had mild level of depression. Among 41-60 years, 5(17%) had normal, 5(17%) had mild level of depression and 2 (7%) had borderline level of depression. Among 60 -80 years 5(17%) had normal, 3(10%) had mild and 4(13%) borderline level of level of depression. The obtained chi-square value 5.21 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no

significant association between levels on depression among clients on hemodialysis with age.

With regard to gender, among male 7(23%) had normal, 5(17%) had mild, 3(10%) had borderline level of depression. Among female 9(30%) had normal, 3(10%) had mild and 3(10%) had borderline level of depression. The obtained chi-square value 1.61 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was not significant association between level of depression among clients on hemodialysis with gender.

With regard to marital status, among married 9(30%) had normal, 5(17%) had mild level of depression and 5(17%) had borderline level of depression. Among widow/widower, 3(10%) had normal, 2(7%) had mild level of depression and 1(3%) had borderline level of depression. Among separated 1(3%) had normal and 1(3%) had mild level depression. Among single, 3(10%) had normal level of depression. The obtained chi-square value 6.49 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was not significant association between level of depression among clients on hemodialysis with marital status.

It revealed that, with regard to type of family, among nuclear family, 8(27%) had normal, 7(23%) had mild level of depression, and 8(27%) had borderline level of depression, Among joint family, 4(13%) had normal, and 3(10%) had mild level of depression. The obtained chi-square value 3.31 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with type of family.

It also revealed that, with regard to education, among primary, 3(10%) had normal. Among secondary 8 (27%) had normal, 2(7%) had mild level of depression and 2(7%) had borderline level of depression. Among Higher secondary, 3(10%) had normal, 2(7%) had mild level of depression and 6(20%) had borderline level of depression. Among degree 2(7%) had normal, 2(7%) had mild level of depression. The obtained chi-square value 9.06 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was a significant association between level of depression among clients on hemodialysis with education.

With regard to occupation, among government employee, 3(10%) had normal, 2(7%) had mild level of depression and 1(3%) had borderline level of depression. Among private employee, 6(20%) had normal, 5(17%) had mild level of depression and 1(3%) had borderline level of depression. Among self-employee, 4(13%) had normal, 2(7%) had mild level of depression, 1(3%) had borderline level of depression. Among unemployed, 3(10%) had normal, 2(7%) had mild level of depression. The obtained chi-square value 0.73 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with occupation.

It reveals to income, among below Rs3000/- 5(17%) had normal, 3 (10%) had mild level of depression and 1(3%) had borderline level of depression. Among Rs3000/-5000/, 9(30%) had normal, 4(13%) had mild level of depression and 2(7%) had borderline level of depression. Among above Rs5000/, 4(13%) had normal, 2(7%) had mild level of depression. The obtained chi-square value 0.93 was not significant.

Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with income.

With regards to frequency on dialysis, among once a week 2(7%) had normal, 1(3%) had mild level of depression. Among twice a week, 10(33%) had normal, 5(17%) had mild level of depression and 5(17%) had borderline level of depression. Among thrice a week, 4(13%) had normal, 2(7%) had mild level of depression and 1(30%) had borderline level of depression. The obtained chi-square value 0.11 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with frequency on dialysis.

It reveals that sleeping pattern, among less than 3 hours, 2(7%) had normal, 2(7%) had mild level of depression and 2(7%) had borderline level of depression. Among 3-6 hours, 6(20%) had normal, 5(17%) had mild level of depression and 1(3%) had borderline level of depression. Among more than 6 hours, 3(10%) had normal, 4(13%) had mild level of depression and 5(17%) had borderline level of depression. The obtained chi-square value 2.06 was not significant. Hence the stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with sleeping pattern.

It reveals that Duration of illness, among less than 3 years, 6(20%) had mild level of depression. Among 3-6 years 5(17%) had normal. 15(50%) had mild level of

depression and 2(7%) had borderline level of depression. Among more than 6 years, 1(3%) had mild level of depression and 1(3%) had borderline level of depression. The obtained chi-square value 3.2 was not significant. Hence stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with duration of illness.

It also reveals that Duration of dialysis, among 2-3 hours 5(17%) had normal, 1(3%) had mild level of depression and 1(3%) had borderline level of depression. Among 3-4 hours, 9(30%) had normal, 6(20%) had mild level of depression and 4(13%) had borderline level of depression. Among above 4 hrs 3(10%) had normal, 2(7%) had mild level of depression. The obtained chi-square value 1.5 was not significant. Hence the stated hypothesis (H_2) was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with Duration of dialysis.

It revealed that type of vascular access, among AV fistula, 8(27%) had normal, 12(40%) had mild level of depression and 4(13%) had borderline level of depression. Among jugular catheter 3(10%) had mild level of depression. Among femoral catheter, 2(7%) had normal. The obtained chi-square value 3.4 was not significant. Hence the stated hypothesis (H_2) was not supported. So it is inferred that there is significant association between level of depression among clients on hemodialysis with type of vascular access.

It reveals that practicing any complementary therapy, among yes, 4(13%) had normal, 3(10%) had mild level of depression. Among no, 9(30%) had normal, 8(27%)

had mild level of depression, 6(20%) had borderline level of depression. The obtained chi-square value 2.32 was not significant. Hence, the stated hypothesis was not supported. So it is inferred that there was no significant association between level of depression among clients on hemodialysis with practicing any complementary therapy.

DISCUSSION

CHAPTER-V

DISCUSSION

The present study aims to evaluate the effectiveness of Music Therapy in reducing level of Depression among clients on hemodialysis. The study was conducted by using quasi experimental design. Malankara Orthodox Syrian Church Medical College Hospital at Kerala was selected for conducting the study. The sample was 30.

The modified Beck's depression scale was used to assess the level of depression among clients on hemodialysis.

The responses were analyzed by using descriptive statistics (Mean, Standard Deviation, Frequency and Percentage) and inferential statistics (Paired "t" test and Chi Square). Discussion on the findings was arranged based on the objectives of the study.

The first objective of the study was to assess the level of depression among clients on hemodialysis. Among this group, in the pretest 9(30%) clients had mild level of depression, 12(40%) had borderline level of depression and 9(30%) had moderate level of depression. (Table: 2)

The study finding was supported by the findings of the study done by Klanc et al, (2009) assessed the prevalence of depression among hemodialysis patients in an

University hospital at Mostar. Data collection using the Beck's depression scale recorded higher prevalence of depression of 51.8%. Thus the researchers concluded that the clients on hemodialysis had a significantly moderate level of depression in comparison with general population.

The second objective was to evaluate the effectiveness of Music Therapy in terms of depression among clients on hemodialysis. The study findings revealed that out of 30 subjects, majority of them 12(40%) had borderline level of depression and 9(30%) had moderate and mild level of depression respectively in pretest. In Post test 13(43%) of them normal, 16(45%) of them had mild level of depression, 1(3%) of them had borderline level of depression. (Table 3.1)

It also revealed that the pretest mean depression was 18.8, standard deviation of 3.43. In the post test mean depression was 11.2, standard deviation of 2.03 and mean difference was 7.6, t value was 12.72, it was significant at $P < 0.05$ level. H_1 is accepted. (Table: 3.2).

The findings of the study was supported by Moradipinnah et al (2009) conducted a case-control study to examine the effect the ragas of Mohana, Kalyani and Sindhubhairavi on the level of depression experienced by patients on hemodialysis, as measured by the 21-item Depression Scale. Differences in pre- and post-intervention scores demonstrated that there were significant decreases in mean scores of depression ($P = 0.02$) in the intervention group, who listened to 20 minutes of relaxing music, as compared with the control group who had 20 minutes of simple bed rest.

Hence the stated hypothesis H_1 (There will be a significant difference between mean, pre and post test score on the level of depression among client on hemodialysis) was accepted. It revealed that Music Therapy was effective in terms of depression among clients on hemodialysis was effective.

The third objective was to determine the association between the level of depression among clients on hemodialysis with their selected demographic variables. The study findings revealed that in pretest there was a significant association between the level of depression in education (13.28*) and type of vascular access (11.23*) among clients on hemodialysis.(Table:4.1).

Hence the stated hypothesis H_2 (There will be a significant association between level of depression among clients on hemodialysis with their selected demographic variables) was accepted in education and type of vascular access.

In the posttest there was no significant association between level of depression among clients on hemodialysis with their demographic variables (Table :4.2).

*SUMMARY,
CONCLUSION AND
RECOMMENDATIONS*

CHAPTER-VI

SUMMARY, CONCLUSION, AND RECOMMENDATION

This chapter deals with Summary, Conclusion and Recommendation of the study. Further it includes implications for Nursing practice, Nursing education, Nursing administration and Nursing research.

Summary of the Study

The present study to evaluate the effectiveness of Music Therapy in terms of depression among clients on Hemodialysis in Malankara Orthodox Syrian Church Medical College Hospital, Kerala.

The Objectives of the Study were

- To assess the level of depression among clients on hemodialysis.
- To evaluate the effectiveness of Music Therapy on level of depression among clients on hemodialysis.
- To determine the association between the level of depression among clients on hemodialysis with their selected demographic variables.

A pre-experimental design was used to evaluate the effectiveness of Music Therapy on depression among clients on Hemodialysis in a selected hospital at Kerala.

Non-probability purposive sampling technique was adopted to select the sample with inclusion criteria sample size was 30.

The data collection tool consisted of two parts.

Part I: Selected demographic variables of clients on Hemodialysis.

Part II: Modified Beck's Depression scale to assess the level of depression.

Content validity was checked by 5 experts in Nursing and Medicine. Data collection was done using modified Beck's Depression scale. Pre test was done on day one followed by the Music Therapy from 2nd to 15th day. This intervention was given for 20 minutes per day for 14 consecutive days. Post test was done on day 16th.

The collected data was analyzed by the using both descriptive statistics (Mean, Standard Deviation, Frequency and Percentage) and inferential statistics (Paired "t" test and Chi-Square) and results were calculated.

Major Study Findings

Major findings of the study are

- With respect to the demographic variables 40% of the clients were in the age group of 41-60 years, and 6-80 years, 50% of them were males and females, 63% of them were married, 77% of them were hailing from nuclear family, 40% of them had studied up to secondary education, 40% of them were private employees, 50% of them earned an income between Rs3000/-5000/, 67% of clients on hemodialysis were twice in week, 53% of them slept between 3-6 hours/day, 73% of clients on

hemodialysis 3-6 years of duration of illness, 60% of clients on hemodialysis 2-3 hours of duration of dialysis, 80% of them had AV fistula, 76% of them were not practicing other complementary therapies.

- With regard to effectiveness of Music Therapy on level of depression among clients on hemodialysis, the mean post test depression was less than mean pre test score. The Obtained “t” value 12.72 was significant at $P < 0.05$ level.
- With regard to the association between the levels of depression with their selected demographic variables, the study finding revealed a significant association between the levels of depression with education and type of vascular access.

Conclusion

The main conclusion drawn from this present study was that majority of the clients on hemodialysis had mild borderline and moderate level of depression. The overall pre test mean value was 18.8 and post test mean value was 11.2 and mean difference was 7.6 and ‘t’ value was 12.72. This ensures that after administration of Music Therapy the sample became familiar and found themselves comfortable and expressed satisfaction, this concluded that administration Music Therapy will reduce the level of depression among clients on hemodialysis.

Implications of the Study

Nursing implication usually includes specific suggestions for Nursing Practice, Nursing Administration and Nursing Research. Nursing Implication for this study was enlisted below.

Nursing Practice

- The study findings clearly point out that the administration of Music therapy was effective in reducing the level of depression among clients on hemodialysis. Nurses can be inserted on the use of Music Therapy as non threatening medium of relaxation therapy and it is easy to administer and inexpensive one.
- It helps to encourage the use of music therapy as a form of mind and body relaxation technique and it has no adverse effects on clients on hemodialysis.
- The study finding helps the nurse to know the importance of Music Therapy In reducing the level of depression and helps to motivate the clients with depression on hemodialysis.
- The reduction of level of depression among clients on hemodialysis has an important role to play in enabling effectiveness of Music Therapy as an independent nursing intervention.

Nursing Education

- Nursing curriculum has to focus on screening programme of clients with depression who is on hemodialysis.
- Nursing students should be taught about the importance of Music Therapy, which enable to reduce the depression which is commonly occur in clients on hemodialysis.

Nursing Administration

- Nurse administrator can plan for in service education programs on the use of complementarytherapy in reduction of major symptoms among chronic illness

- Nurse or Administrator should motivate the nursing personnel to apply the mind and body relaxation into practice.
- Nursing Administrator should encourage the nursing personnel to learn the mind and body relaxation technique like music therapy.

Nursing Research

- The study findings can be added to the research review regarding the effectiveness of Music Therapy on reducing depression.
- The study finding can be kept as the baseline data and further research can be in same settings.
- As evidence from the review of literature more research needs to be conducted on the effectiveness of Music Therapy along with other routine practice.

Limitation

- Doctor's rounds interfered with the administration of intervention.

Recommendations

- The same study can be conducted indifferent settings such as hospital, community and rehabilitation centre.
- A similar study can be conducted among large sample size.
- A longitudinal study can be conducted in the community.
- Effectiveness of this Music Therapy can be compared with other complementary therapies.
- A similar study can be done to see the effect of music in other chronic illness.

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APPENDICES

APPENDIX – A

Letter seeking permission to Conduct Study

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R Medical University, Chennai.

Approved by the Indian Nursing Council, New Delhi &

Tamil Nadu Nurses and Midwives Council, Chennai.

Madukkarai Market Road,
P.B. No. 4431
Industrial Estate Post,
COIMBATORE - 641 021.

Phone : 0422 - 2675641, 2672705

Fax : 0422 - 2676016

Email : ceandct@dataone.in

ceandct@gmail.com

Website: www.annaimeenakshi.in

Ref. No. Ref: AMC/108/2010

July 26, 2011

To

The Administrative Director,
Malankara Orthodox Syrian Church
Medical College Hospital,
Kolenchery,
Kerala.

Respected Sir,

Ms.Nimi Paul., is a student of M.Sc., (Nursing) II year, student of Annai Meenakshi College of Nursing, Coimbatore. She is conducting a study to assess the "A Study to Evaluate the Effectiveness of Music Therapy in terms of Depression among Clients on Hemodialysis in a Selected Hospital at Kerala.

This is for her research work to be submitted to the Tamil Nadu Dr. M.G. R. Medical University in Partial fulfillment of the university requirement for the award of M.Sc., (Nursing) Degree.

As a part of her study she would like to collect the data from clients undergoing hemodialysis, of your esteemed Institution. Further details of the proposed project will be furnished by the student personally.

Kindly give her permission for the same reason. The norms, ethics and policies practiced by the college will be addressed by the student.

Thanking you,

Yours faithfully,


PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

APPENDIX – B

Letter granting permission for Conducting Study



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

—(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)—

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2760251, 3055555
3055666, Fax: 2760409, Gram: "MISSIONHOS", E-mail: mmmhn@moscmm.org, www.moscmm.org

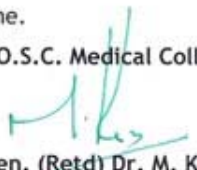
*Dated: 30th August 2011,
Ref: MOSC/HRM/TO/2011,*

TO WHOM SOEVER IT MAY CONCERN

This is to certify that Ms. Nimi Paul, II year M.Sc. Nursing student of Annai Meenakishi College of Nursing, Coimbatore (affiliated to Dr. M.G.R. Medical University, Chennai), is permitted to conduct for the dissertation work, as part of her course curriculum, titled **"A Study to Evaluate the Effectiveness of Music Therapy in terms of Depression among Clients on Hemodialysis"** at our collegiate hospital, in the department of Nephrology, during the period from 04.08.2011 to 30.08.2011, as partial fulfillment of the course curriculum.

M.O.S.C. Medical College Hospital is 1050-bedded multi-specialty hospital with super-specialty departments of Cardiology, Gastroenterology, Neonatology, , Nephrology, Pediatric Surgery, Neuro Surgery, Neurology, Plastic & Micro vascular Surgery and Urology along with other departments of Imageolgy, Dermatology, Dental surgery, General surgery, Orthopedic, Arthroplasty, General Medicine, Gynecology & Obstetrics, Pediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anesthesiology and Pulmonary Medicine.

For M.O.S.C. Medical College Hospital,


Maj. Gen. (Retd) Dr. M. Kesavan
Administrative Director



APPENDIX – C

Letter Requesting Experts Opinion for Content Validity of the Tool

ANNAI MEENAKSHI COLLEGE OF NURSING

Affiliated with the Tamil Nadu Dr. M.G.R. Medical University, Chennai.

Approved by the Indian Nursing Council, New Delhi &

Tamil Nadu Nurses and Midwives Council, Chennai.

Madukkarai Market Road,
P.B. No. 4431
Industrial Estate Post,
COIMBATORE - 641 021.

Phone : 0422 - 2675641, 2672705

Fax : 0422 - 2676016

Email : ceandct@dataone.in

ceandct@gmail.com

Website: www.annaimeenakshi.in

Ref. No.

Requisition for Content Validity

Date :

From

Ms. Nimi Paul

I - Year M.Sc(N)

Annai Meenakshi College of Nursing,

Coimbatore – 21.

Through

The Principal,

Annai Meenakshi College of Nursing,

Coimbatore – 21.

To


PRINCIPAL
Annai Meenakshi College of Nursing
COIMBATORE-641 021.

Respected Sir/Madam,

Sub: Requisition for expert opinion and suggestion for content validity of the tools – Reg.

I am a student of M.Sc., Nursing I year of Annai Meenakshi College of Nursing, Coimbatore, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai. As a partial fulfillment of the M.Sc., Nursing programme. I am conducting “A Study to Evaluate the Effectiveness of Music Therapy in Terms of Depression among Clients on Hemodialysis in a Selected Hospital at Kerala. I am hereby enclosing the following:

1. Statement and objectives of the study
2. Hypotheses
3. Methodology
4. Tool
5. Intervention
6. Content Validity certificate.

Herewith I am submitting the developed tool for content validity and for expert opinion and possible suggestion. It will be grateful to you and request you to return the same to the undersigned at the earliest possible.

Thanking you,

Yours faithfully,

Place: Coimbatore

Date:

Managed by : CHEMISTS EDUCATIONAL & CHARITABLE TRUST

Administrative Office : College Campus, Madukkarai Market Road, Coimbatore - 641 021.

APPENDIX – D

List of Experts who validated the Tool

- Dr. KISHORE. S. DHARAN, MD. DM (Nephro)

Consultant Neprologist,

M.O.S.C. Medical College Hospital,

Kolenchery.

- Dr. S. VEERAKESARI, MD.,

Consultant Physician,

Meenakshi Hospital,

Coimbatore.

- Mrs. K. RAJI, M.Sc (N).,

Vice Principal,

K.G. College of Nursing,

Coimbatore.

- Mrs. DEEPA, M.Sc (N).,

Professor,

Ramakrishna College of Nursing,

Coimbatore.

➤ Mrs. SHYLA ISSAC, M.Sc (N).,
Principal,
Abhirami College of Nursing,
Coimbatore.

➤ Mr. BALA SUBRAMANIAM, M.Sc (N).,
Professor,
K.M.C.H College of Nursing,
Coimbatore.

APPENDIX - E

Structured Self administered Questionnaire

PART-I

Questionnaire to assess the demographic variables of clients
undergoing haemodialysis.

Please put mark (√) on the appropriate column.

Sample No:

1. Age (in years)

a)20-40 ()

b)41-60 ()

c) 60 -80 ()

2. Gender

a) Male ()

b) Female ()

3. Marital status

a) Married ()

b) Widow/widower ()

c) Divorced ()

d) Separated ()

e) Single ()

4. Type of family

a) Nuclear family ()

b) Joint family ()

5. Education

a) Primary ()

b) Secondary ()

c) Higher secondary ()

d) Degree/Equivalent ()

6. Occupation

a) Government Employee ()

b) Private Employee ()

c) Self Employee ()

d) Un Employee ()

e) Retired ()

7. Income

a) Below ₹ 3000/- ()

b) ₹3000/- 5000/- ()

c) Above ₹ 5000/- ()

8. Frequency of Dialysis

a) Once a week ()

b) Twice a week ()

c) Thrice a week ()

9. Sleeping pattern

- a) Less than 3 hrs ☐
- b) 3-6 hrs ☐
- c) More than 6 hrs ☐

10. Duration of illness

- a) Less than 3 years ☐
- b) 3-6 years ☐
- c) More than 6 years ☐

11. Duration of dialysis

- a) 1 -2hrs ☐
- b) 2-3 hr ☐
- c) 3-4 hr ☐
- d) Above 4 hr ☐

12. Type of Vascular Access

- a) AV Fistula ☐
- b) Graft ☐
- c) Shunt ☐
- d) Jugular catheter ☐
- e) Femoral catheter ☐

13. Are you using other complementary therapies

- a) Yes ☐
- b) No ☐

If yes

- a) Aromatherapy ☐
- b) Yoga ☐
- c) Laughter therapy ☐

PART II

MODIFIED BECK'S DEPRESSION SCALE TO ASSESS THE LEVEL OF DEPRESSION

Please put mark (✓) on the appropriate column.

1. Sadness

- a) I do not feel sad.
- b) I feel sad much of the time.
- c) I am sad all the time.
- d) I am so sad or unhappy that I can't stand it.

2. Pessimism

- a) I am not discouraged about my future.
- b) I feel more discouraged about my future than I used to be.
- c) I do not expect things to work out for me
- d) I feel my future is hopeless and will only get worse.

3. Past Failure

- a) I do not feel like a failure.
- b) I feel I have failed more than I should have.
- c) As I look back, I see a lot of failures.
- d) I feel I am a total failure as a person.

4. Loss of Pleasure

- a) I get as much pleasure as out of things I used to
- b) I don't enjoy things as much as I used to.
- c) I have little pleasure from the things I used to enjoy.
- d) I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

- a) I don't feel particularly guilty.
- b) I feel guilty over many things I have done or should have done.
- c) I feel quite guilty most of the time.
- d) I feel guilty all of the time

6. Punishment Feelings

- a) I don't feel I am being punished.
- b) I feel I may be punished.
- c) I expect to be punished.
- d) I feel I am being punished.

7. Self-Dislike

- a) I feel the same about myself as ever.
- b) I have lost confidence in myself.
- c) I disappointed in myself.
- d) I dislike myself.

8. Self-Criticalness

- a) I don't criticize or blame myself more than usual.
- b) I am more critical of myself than I used to be.
- c) I criticize myself for all of my faults.
- d) I blame myself for everything bad that happens.

9. Socialization

- a) I feel level of socialization remain the same as earlier
- b) I show less interest in socialization.
- c) I try to withdraw from socializing with others.
- d) I feel good to be alone.

10. Crying

- a) I don't cry any more than.
- b) I cry over every little thing.
- c) I feel like crying, but I can't.

11. Agitation

- a) I am no more worry or wound up than usual.
- b) I feel more disturb or wound up than usual.
- c) I am so disturb or agitated that it's hard to stay still.
- d) I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

- a) I have not interest in other people or activities.
- b) I am less interested in other people or things than before.
- c) I have lost most of my interest in other people or things.
- d) It's hard to get interested in anything.

13. Indecisiveness

- a) I make decisions about as well as ever.
- b) I find it more difficult to make decisions than usual.
- c) I have much greater difficulty in making decisions than I used to.
- d) I have trouble in making any decisions.

14. Worthlessness

- a) I do not feel I am worthless.
- b) I don't consider myself as worthwhile and useful as I used to.
- c) I feel more worthless as compared to other people.
- d) I feel utterly worthless.

15. Loss of Energy

- a) I have as much energy as ever.
- b) I have less energy than I used to have.
- c) I don't have enough energy to do very much.
- d) I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

- a) I can sleep as well as usual.
- b) I don't sleep as well as I used to.
- c) I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
- d) I wake up several hours earlier than I used to and cannot get back to sleep.

17. Irritability

- a) I am no more irritable than usual.
- b) I am more irritable than usual.
- c) I am much more irritable than usual.
- d) I am irritable all the time.

18. Changes in Appetite

- a) My appetite is no worse than usual.
- b) My appetite is not as good as it used to be
- c) My appetite is much worse now.
- d) I have no appetite at all time

19. Concentration Difficulty

- a) I can concentrate as well as ever.
- b) I can't concentrate as well as usual.
- c) It's hard to keep my mind on anything for very long.
- d) I find I can't concentrate on anything.

20. Responsibility

- a) I take responsibility of my family.
- b) I get confused while taking responsibility of my family.
- c) I am not interested in taking responsibility of my family.
- d) I am always with draw from responsibility of my family.

21. Loss of Interest in Sex

- a) I have not noticed any recent change in my interest in sex.
- b) I am less interested in sex than I used to be.
- c) I am much less interested in sex now.
- d) I have lost interest in sex completely.

APPENDIX-F

பகுதி - ஐ

இரத்த சுத்திகரிப்புக்கு செல்லும் நோயாளியின் தனிநபர் புள்ளிவிபரம்

சரியான கட்டத்தில் (✓) செய்யவும்

1. வயது (வருடத்தில்)

அ. 20 – 40 ()

ஆ. 41 – 60 ()

இ. 61 – 80 ()

2. பாலினம்

அ. ஆண் ()

ஆ. பெண் ()

3. மணமானவரா ?

அ. திருமணமானவர் ()

ஆ. விதவை/மனைவியை இழந்தவர் ()

இ. விவாகரத்து ஆனவர் ()

ஈ. பிரிந்து இருப்பவர் ()

உ. திருமணமாகாதவர் ()

4. குடும்ப அமைப்பு

அ. தனிக்குடும்பம் ()

ஆ. கூட்டுக்குடும்பம் ()

5. கல்வி

- அ. ஆரம்பநிலைக் கல்வி(1-5 ம் வகுப்பு) ()
- ஆ. இடைநிலைக் கல்வி (6 -10 ம் வகுப்பு) ()
- இ. மேல்நிலைக் கல்வி (11 – 12ம் வகுப்பு) ()
- ஈ. பட்டப்படிப்பு , அதற்கு இணையான ()

6.தொழில்

- அ. அரசுஊழியர் ()
- ஆ. தனியார் துறை ()
- இ. சுயதொழில் ()
- ஈ. வேலை இல்லாதவர் ()
- உ. ஓய்வுபெற்றவர் ()

7.வருமானம்

- அ. ரூ. 3000/- க்கும் குறைவாக ()
- ஆ. ரூ.3000/- - ரூ.5000/- ()
- இ. ரூ.5000/- க்கும் அதிகமாக ()

8.டயாலிசிஸ் தவணைகள் (இரத்த சுத்திகரிப்பு)

- அ. வாரம் ஒருமுறை ()
- ஆ. வாரம் இருமுறை ()
- இ. வாரம் மும்முறை ()

9. தூக்கம்

- அ.மூன்று மணிநேரத்திற்கும் குறைவாக ()
- ஆ. 3-6 மணிநேரம் ()
- இ. 6 மணி நேரத்திற்கு மேல் ()

10.நோயின் காலஅளவு

அ. 3 வருடங்களுக்கும் குறைவாக ()

ஆ. 3-6 வருடங்கள் ()

இ. 6 வருடங்களுக்குமேல் ()

11. டயாலிசிஸ் காலஅளவு (இரத்த சுத்திகரிப்பின் காலஅளவு)

அ. 1-2 மணிநேரம் ()

ஆ. 2-3 மணிநேரம் ()

இ. 3-4 மணிநேரம் ()

ஈ. 4 மணி நேரத்திற்கும் மேல் ()

12. இரத்தகுழாய் அணுகும் முறைகள்

அ. பிஸ்டுலா ()

ஆ. கிராப்ட் ()

இ. ஷண்ட் ()

ஈ. ஜீகுலர் கதீட்டர் ()

உ. பெமோரல் கதீட்டர் ()

13.நீங்கள் வேறுஏதேனும் பயிற்சி மேற்கொள்கிறீர்களா ?

அ. ஆம் ()

ஆ. இல்லை ()

ஆம் எனில், கீழ்காண்பவனவற்றில் எது என குறிப்பிடுக

அ. நறுமண சிகிச்சை ()

ஆ. யோகா ()

இ. லாப்டர் சிகிச்சை ()

பகுதி II

மன இறுக்கத்தின் அளவை கண்டறிதல்

சரியான கட்டத்தில் (v) செய்யவும்.

1. வருத்தமாக இருப்பது பற்றிய உணர்வு

- அ) உணர்வில்லை. ()
- ஆ) பல சமயங்களில் உணருகிறேன். ()
- இ) எப்பொழுதும் உணருகிறேன். ()
- ஈ) தாங்கிக்கொள்ள முடியாத அளவு உணருகிறேன். ()

2. எதிர்காலத்தைப் பற்றிய எதிர்மறை எண்ணம்

- அ) எதிர்காலத்தை குறைவாக மதிப்பிடவில்லை. ()
- ஆ) எப்பொழுதையும்விட குறைவாக மதிப்பிடுகிறேன். ()
- இ) நான் எடுத்த காரியங்களில் எதுவும் நிறைவேறாது. ()
- ஈ) நம்பிக்கையற்று மிகக் கெடுதலாக உணருகிறேன். ()

3. கடந்த கால தோல்விகள் பற்றிய எண்ணம்

- அ) தோல்வி அடைந்ததாக எண்ணவில்லை. ()
- ஆ) எதிர்பார்த்ததைவிட அதிகமான தோல்விகள். ()
- இ) மிக அதிகமான தோல்விகள். ()
- ஈ) முழுமையாக தோல்வி அடைந்தேன். ()

4. சந்தோசக் குறைவு

- அ) வழக்கம்போல் எல்லா சந்தர்ப்பங்களிலும் இன்பமாக இருக்கிறேன். ()
- ஆ) எப்போதும் இருப்பதுபோல் தற்போது இன்பமாக இல்லை. ()
- இ) மிகவும் பிடித்த விசயங்களில் இருந்துகூட குறைந்த இன்பமே கிடைக்கிறது. ()
- ஈ) மிகவும் பிடித்த விசயங்களில் இருந்து இன்பம் கிடைப்பதில்லை. ()

5. குற்ற உணர்வு

- அ) குற்ற உணர்வு அடைந்ததில்லை. ()
- ஆ) செய்ய வேண்டிய மற்றும் செய்த பல காரியங்களால் குற்ற உணர்வு அடைந்திருக்கிறேன். ()
- இ) பல நேரங்களில் குற்ற உணர்வோடு இருக்கிறேன். ()
- ஈ) எப்பொழுதும் குற்ற உணர்வோடு இருக்கிறேன். ()

6. தண்டனை உணர்வுகள்

- அ) தண்டனை பெறுவதாக உணர்வதில்லை. ()
- ஆ) தண்டனை கிடைக்கக்கூடும் என உணர்கிறேன். ()
- இ) தண்டனையை எதிர்பார்க்கிறேன். ()
- ஈ) தண்டனை கிடைப்பதாக உணர்கிறேன். ()

7. சுய வெறுப்பு

- அ) சுய எண்ணம் வழக்கத்தைப்போல் உள்ளது. ()
- ஆ) என்மீது உள்ள நம்பிக்கையை இழந்துவிட்டேன். ()
- இ) என்னைப் பற்றி ஏமாற்றமாக உள்ளது. ()
- ஈ) எனக்கே என்னைப் பிடிக்கவில்லை. ()

8. சுய குற்றச்சாட்டு

- அ) வழக்கத்தைவிட அதிகமாக குற்றம் சாட்டவில்லை. ()
- ஆ) வழக்கத்தைவிட அதிகமாக குற்றம் சாட்டுகிறேன். ()
- இ) நான் செய்யும் அனைத்து தவறுகளுக்கும் என்னையே குற்றம் சாட்டிக்கொள்கிறேன். ()
- ஈ) என்னை சுற்றி நடக்கும் அனைத்து தவறுகளுக்கும் என்னையே குற்றம் சாட்டிக்கொள்கிறேன். ()

9. சமூக உறவு

- அ) சமூக உறவு முன்பு இருந்ததைப்போல் இப்பொழுதும் இருப்பதாக நான் உணர்கிறேன். ()
- ஆ) சமூக உறவின் மீது நான் குறைந்த அளவு ஆர்வம் காட்டுகிறேன். ()
- இ) மற்றவர்களிடம் கொண்ட சமூக உறவிலிருந்து நான் விலகிவர முனைகிறேன். ()
- ஈ) தனிமையாக இருப்பதை நான் விரும்புகிறேன். ()

10. அழுக்கை

- அ) வழக்கத்தைவிட அதிகமாக அழுவதில்லை. ()
- ஆ) வழக்கத்தைவிட அதிகமாக அழுகிறேன். ()
- இ) சின்னச்சின்ன விசயங்களுக்காக்கட அழுகிறேன். ()
- ஈ) அழ வேண்டும்போல் உள்ளது, ஆனால் முடியவில்லை. ()

11. படபடப்பு

- அ) வழக்கத்தைவிட அதிகமாக படபடப்பாக இருப்பதாக உணரவில்லை. ()
- ஆ) வழக்கத்தைவிட அதிகமாக படபடப்பாக இருப்பதாக உணர்கிறேன். ()
- இ) படபடப்பாக இருப்பதைவிட அமைதியாக இருப்பது மிகவும் கடினமாக உணர்கிறேன். ()
- ஈ) படபடப்பாக இருப்பதால் ஏதாவது செய்துகொண்டே இருக்கிறேன். ()

12. ஆர்வம் இல்லாமை

- அ) மக்களிடம் ஆர்வத்தை இழக்கவில்லை. ()
- ஆ) முன்பைவிட மற்ற விசயங்களில் மிகவும் ஆர்வம் குறைந்துள்ளது. ()
- இ) மக்களிடம் மிகவும் ஆர்வம் குறைந்துள்ளது. ()
- ஈ) எந்த விசயத்திலும் ஆவரம் வருவது மிகவும் கடினமாக உள்ளது. ()

13. முடிவு எடுக்க முடியாமை

- அ) எப்பொழுதும்போல் முடிவு எடுக்கிறேன். ()
- ஆ) வழக்கத்தைப்போல் முடிவு எடுப்பதில் அதிக கடினத்தை உணர்கிறேன். ()
- இ) வழக்கத்தைப்போல் முடிவு எடுப்பது மிகவும் கடினமாக உள்ளது. ()
- ஈ) முடிவு எடுக்க முடியவில்லை. ()

14. மதிப்பின்மை

- அ) மதிப்பில்லாத மாதிரி என்னை நினைக்கவில்லை. ()
- ஆ) என்னைப் பற்றி எனக்கே மதிப்புடையவராக நான் உணரவில்லை. ()
- இ) மற்றவர்களை என்னுடன் ஒப்பிடும்போது மதிப்பில்லாதது போல உணருகிறேன். ()
- ஈ) முழுமையாக மதிப்பு இழந்ததாக உணருகிறேன். ()

15. பலவீனம்

- அ) எப்பொழுதும்போல் சக்தியாக உள்ளேன். ()
- ஆ) வழக்கத்தைவிட பலம் குறைந்ததாக உணர்கிறேன். ()
- இ) என் பலவீனத்தால் என்னால் சில காரியங்கள் செய்ய முடியவில்லை. ()
- ஈ) எந்த காரியத்தையும் செய்ய பலம் இல்லை. ()

16. தூக்க வழக்கவழக்கங்கள் மாற்றம்

- அ) வழக்கம்போல் தூங்குகிறேன். ()
- ஆ) வழக்கம்போல் நான் தூங்குவதில்லை. ()
- இ) வழக்கத்தைவிட 1-2 மணிநேரம் முன்பே விழிக்கிறேன் மற்றும் மறுபடியும் தூங்குவதற்கு சிரமமாக உள்ளது. ()
- ஈ) வழக்கத்தைவிட பல மணி நேரம் முன்னதாகவே விழிக்கிறேன் மற்றும் மறுபடியும் தூங்க முடியவில்லை. ()

17. எரிச்சல்

- அ) வழக்கத்தைவிட அதிகமாக எரிச்சல் அடைவதில்லை. ()
- ஆ) வழக்கத்தைவிட அதிகமாக எரிச்சல் அடைகிறேன். ()
- இ) வழக்கத்தைவிட மிக அதிகமாக எரிச்சல் அடைகிறேன். ()
- ஈ) எப்பொழுதும் எரிச்சலாக உள்ளேன். ()

18. பசியில் மாற்றம்

- அ) பசியில் எந்த மாற்றமும் இல்லை. ()
- ஆ) வழக்கத்திற்கு மாறாக பசி கொஞ்சம் குறைவாக உள்ளது. ()
- இ) வழக்கத்தைவிட பசி அதிகமாக உள்ளது. ()
- ஈ) எப்பொழுதும் பசி இல்லை. ()

19. கவனக்குறைவு

- அ) கவனம் வழக்கத்தைப்போல் உள்ளது. ()
- ஆ) வழக்கத்தைப்போல் கவனம் செலுத்த முடியவில்லை. ()
- இ) எதன்மேலும் அதிக நேரம் கவனம் செலுத்த முடியவில்லை. ()
- ஈ) எதன்மேலும் கவனம் செலுத்த முடியவில்லை. ()

20. கடமை உணர்வு

- அ) நான் என்னுடைய குடும்பத்தின்மீது கடமை உணர்வு கொண்டுள்ளேன். ()
- ஆ) நான் என்னுடைய கடமை உணர்வு கொள்ளும்போது குழப்பம் அடைகிறேன். ()
- இ) எனக்கு என்னுடைய குடும்பத்தின்மீது கடமை உணர்வு கொள்வதில் விருப்பம் இல்லை. ()
- ஈ) நான் என்னுடைய குடும்பத்தின் மீது கொண்ட கடமை உணர்வை எப்பொழுதும் தவறவிடுகிறேன். ()

21. தாம்பத்திய வாழ்க்கையில் ஆர்வமின்மை

- அ) எந்த மாற்றமுமில்லை. ()
- ஆ) ஆர்வம் குறைந்துள்ளது. ()
- இ) ஆர்வம் மிகக் குறைந்துள்ளது. ()
- ஈ) ஆர்வத்தை முழுவதும் இழந்துள்ளேன். ()

APPENDIX – G

Self Administered Questionnaire

ഭാഗം 1

സമുദായിക കാരണങ്ങൾ

ഉചിതമായ കളത്തിൽ ശരി (✓) ഇടുക

- | 1. | വയസ്സ് (വർഷത്തിൽ) | മാതൃക നമ്പർ |
|----|---------------------|-------------|
| a. | 20-40 | () |
| b. | 41-60 | () |
| c. | 60 നു മുകളിൽ | () |
| 2. | ലിംഗം | |
| a. | ആൺ | () |
| b. | പെൺ | () |
| 3. | ദാമ്പത്യം | |
| a. | വിവാഹിതനാണ് | () |
| b. | വിയവ/വിദാരു | () |
| c. | വിവാഹമോചനം കഴിഞ്ഞത് | () |
| d. | വേർപിരിഞ്ഞത് | () |
| e. | തനിയെ | () |
| 4. | കുടുംബം | |
| a. | അണുകുടുംബം | () |
| b. | കുട്ടു കുടുംബം | () |
| 5. | വിദ്യാഭ്യാസം | |
| a. | പ്രാഥമികം | () |
| b. | രണ്ടാം തരം | () |
| c. | ഉയർന്ന തരത്തിൽ | () |
| d. | ഡിഗ്രി/തുല്യമായത് | () |

6. തൊഴിൽ

- a. സർക്കാർ ജീവനക്കാരൻ ()
- b. സ്വകാര്യ തൊഴിലാളി ()
- c. സ്വയം തൊഴിൽ ()
- d. തൊഴിലില്ലാത്ത ()
- e. വിരമിച്ചത് ()

7. വരുമാനം

- a. 3000 രൂപയ്ക്ക് താഴെ ()
- b. ₹ 3000/ - 5000/ ()
- c. ₹ 5000 മുകളിൽ ()

8. ഡയാലിസിസ് എത്ര തവണ

- a. ആഴ്ചയിലൊരിക്കൽ ()
- b. ആഴ്ചയിൽ രണ്ടു പ്രാവശ്യം ()
- c. ആഴ്ചയിൽ മൂന്നു പ്രാവശ്യം ()

9. ഉറക്കം

- a. മൂന്നു മണിക്കൂർ താഴെ ()
- b. 3 - 6 മണിക്കൂർ ()
- c. 6 മണിക്കൂർ കൂടുതൽ ()

10. അസുഖത്തിന്റെ കാലാവധി

- a. 3 വർഷത്തിൽ താഴെ ()
- b. 3 - 6 വർഷം ()
- c. 6 വർഷത്തിൽ കൂടുതൽ ()

11. ഡയാലിസിസിന്റെ സമയം

- a. 1-2 മണിക്കൂർ ()
- b. 2 - 3 മണിക്കൂർ ()
- c. 3 - 4 മണിക്കൂർ ()
- d. 4 മണിക്കൂർ കൂടുതൽ ()

12. ഡയാലിസിസ് ഏതു വീധേനയാണ്

- a. എ.വി ഫീസ്റ്റ്റുല ()
- b. ഗ്രാഫ്റ്റ് ()
- c. ഷൺറ്റ് ()
- d. ജുഗുളാർ കത്തീറൽ ()
- e. ഫീമോൽ കത്തീറൽ ()

13. മരണത്തെക്കുറിച്ചും പരിപൂർകമായ മാർഗ്ഗം സ്വീകരിക്കുന്നുണ്ടോ?

- a. ഉണ്ട് ()
 - b. ഇല്ല ()
- ഉണ്ടെങ്കിൽ
- a. ആരോമാ തെറാപ്പി ()
 - b. യോഗ ()
 - a. ചിരി ചികിത്സ ()

ഭാഗം 2
മോഡിഫൈഡ് ബെക്ക് ഡിപ്രഷൻ സ്കെയിൽ

സമ്മതപത്രം

നമസ്കാരം. ഞാൻ നിമിപോൾ. കോയമ്പത്തൂരിലുള്ള അണ്ണെ മീനാക്ഷി കോളജ് ഓഫ് നേഴ്സിംഗിൽ എം.എസ്.സി നേഴ്സിംഗിന് പഠിക്കുന്നു. ഹീമോ ഡയാലിസിസിന് വിധേയമായവർക്ക് വിഷാദം കുറയ്ക്കുന്നതിനു വേണ്ടിയുള്ള സംഗീതചികിത്സയെക്കുറിച്ചുള്ള ഗവേഷണം ചെയ്യുകയാണ്. ആയതിനാൽ അതിനു വേണ്ടി താങ്കളുടെ സഹകരണം ഞാൻ വിനീതമായി അഭ്യർത്ഥിക്കുന്നു.

1. ദുഃഖം/ശോകാത്മകം
 - a. നിങ്ങൾക്ക് ദുഃഖം തോന്നുന്നില്ല
 - b. കൂടുതൽ സമയവും നിങ്ങൾ ദുഃഖിതനാണ്
 - c. എല്ലാ സമയവും നിങ്ങൾ ദുഃഖിതനാണ്
 - d. സഹിക്കാവുന്നതിലപ്പുറം നിങ്ങൾ ദുഃഖിതനാണ്
2. അശുഭാപ്തി പ്രതീക്ഷ/ശുഭാപ്തി വിശ്വാസമില്ലായ്മ
 - a. നിങ്ങൾ ഭാവിയെപ്പറ്റി നിറുത്സാഹപ്പെടുന്നില്ല
 - b. നിങ്ങൾ ഭാവിയെക്കുറിച്ച് കൂടുതൽ വ്യാകുലപ്പെടുന്നു.
 - c. നിങ്ങൾക്കു വേണ്ടി തയ്യാറാക്കിയിരിക്കുന്ന കാര്യങ്ങളിൽ പോലും നിങ്ങൾ പ്രതീക്ഷ അർപ്പിക്കുന്നില്ല.
 - d. നിങ്ങളുടെ ഭാവി പ്രതീക്ഷയില്ലാത്തതും
3. പരാജയ ദീപ്തി
 - a. നിങ്ങളുടെ പാളിച്ചകൾ പരാജയം പോലെ തോന്നുന്നില്ല.
 - b. നിങ്ങൾ അർഹിക്കുന്നതിലുപരി പരാജയം നിങ്ങൾക്ക് സംഭവിക്കുന്നു.
 - c. പിന്തിരിഞ്ഞു നോക്കുമ്പോൾ നിങ്ങൾക്ക് ഒരുപാട് പരാജയങ്ങൾ കാണാൻ കഴിയുന്നു.
 - d. നിങ്ങൾ ഒരു പരാജയമാണ്

4. സന്തോഷമില്ലായ്മ

- a. ഇതുവരെയുള്ളതിനേക്കാൾ മെച്ചപ്പെട്ട സന്തോഷം ഇപ്പോൾ ലഭിക്കുന്നു.
- b. ഇതുവരെ ലഭിച്ചിരിക്കുന്ന സന്തോഷം ഇപ്പോൾ ലഭിക്കുന്നില്ല.
- c. സന്തോഷത്തിനു വേണ്ടി നിങ്ങൾ വാങ്ങിയിട്ടുള്ള പലതിൽ നിന്നും വളരെ കുറച്ചു സന്തോഷമേ ലഭിക്കുന്നുള്ളൂ.
- d. സന്തോഷത്തിനു വേണ്ടി നിങ്ങൾ വാങ്ങിയിട്ടുള്ള പലതിൽ നിന്നും അൽപ്പം പോലും സന്തോഷം ലഭിക്കുന്നില്ല.

5. കുററബോധം

- a. നിങ്ങൾക്ക് അത്യാവശ്യമായ കുററബോധം തോന്നുന്നില്ല.
- b. നിങ്ങൾ ചെയ്തതും ചെയ്യാൻ പോകുന്നതുമായ കാര്യങ്ങളെപ്പറ്റി നിങ്ങൾക്ക് കുററബോധം തോന്നുന്നു.
- c. കൂടുതൽ സമയവും നിങ്ങൾക്ക് കുററബോധം തോന്നുന്നു.
- d. നിങ്ങൾക്ക് എല്ലാ സമയവും കുററബോധമുള്ളതായി തോന്നുന്നു

6. ശിക്ഷാബോധം

- a. നിങ്ങൾക്ക് ശിക്ഷിക്കപ്പെടുമെന്നുള്ള ചിന്തയില്ല.
- b. നിങ്ങൾ ശിക്ഷിക്കപ്പെട്ടേക്കാമെന്ന് ഭയക്കുന്നു.
- c. നിങ്ങൾ എപ്പോഴും ശിക്ഷയെ ഭയക്കുന്നു.
- d. നിങ്ങൾ എപ്പോഴും ശിക്ഷിക്കപ്പെടുന്നതായി തോന്നുന്നു.

7. സ്വയം വെറുപ്പ്

- a. എന്നത്തേയും പോലെതന്നെ നിങ്ങൾക്ക് അനുഭവപ്പെടുന്നു
- b. നിങ്ങൾക്ക് ആത്മവിശ്വാസം നഷ്ടപ്പെടുന്നു
- c. നിങ്ങളിൽ തന്നെ നിങ്ങൾ നിരാശനായി തീരുന്നു.
- d. നിങ്ങൾ നിങ്ങളെത്തന്നെ വെറുക്കുന്നു

8. ആത്മവിമർശനം/ആത്മനിരൂപണം

- a. പതിവിൽ കൂടുതലായി നിങ്ങളെത്തന്നെ വിമർശിക്കുകയോ കുററപ്പെടുത്തുകയോ ചെയ്യുന്നില്ല.
- b. നിങ്ങൾ പതിവിൽ കൂടുതൽ നിങ്ങളെത്തന്നെ വിമർശിക്കുന്നു.
- c. നിങ്ങളുടെ എല്ലാ തെറ്റുകളേയും നിങ്ങൾ കുററപ്പെടുത്തുന്നു.

d. നിങ്ങൾക്ക് സംഭവിക്കുന്ന എല്ലാ അനർത്ഥങ്ങൾക്കും നിങ്ങൾ നിങ്ങളെത്തന്നെ കുറ്റപ്പെടുത്തുന്നു.

9. ആത്മഹത്യ ചിന്ത

- a. ആത്മഹത്യയെക്കുറിച്ച് നിങ്ങൾക്ക് ചിന്തയില്ല.
- b. നിങ്ങൾക്ക് നിങ്ങളെത്തന്നെ കൊല്ലുവാനുള്ള ചിന്തകൾ ഉണ്ട് എന്നാൽ അതിന് കഴിയുന്നില്ല.
- c. നിങ്ങൾ നിങ്ങളെത്തന്നെ കൊല്ലുവാൻ ഇഷ്ടപ്പെടുന്നു.
- d. നിങ്ങൾക്ക് അവസരം ലഭിക്കുകയാണെങ്കിൽ നിങ്ങൾക്ക് നിങ്ങളെത്തന്നെ കൊല്ലും.

10. സങ്കടപ്പെടുക

- a. നിങ്ങൾ പതിവിലും കൂടുതൽ സങ്കടപ്പെടുന്നില്ല.
- b. നിങ്ങൾക്ക് പതിവിലും കൂടുതലായി സങ്കടം വരുന്നു.
- c. നിസാരകാര്യങ്ങൾക്കും നിങ്ങൾ കരയുന്നു.
- d. നിങ്ങൾക്ക് കരയണമെന്ന് തോന്നിയാലും അതിന് സാധിക്കുന്നില്ല.

11. പ്രക്ഷോഭം

- a. നിങ്ങൾ സാധാരണയെക്കാൾ കൂടുതൽ മാനസിക സംഘർഷം അനുഭവപ്പെടുന്നില്ല.
- b. നിങ്ങൾ പതിവിലും കൂടുതൽ അസ്വസ്ഥനായി തോന്നുന്നു.
- c. നിങ്ങൾ താങ്ങാവുന്നതിലപ്പുറം മാനസിക സംഘർഷം അനുഭവിക്കുന്ന വ്യക്തിയാണ്.
- d. എന്തെങ്കിലും ചെയ്യാൻ കഴിയാത്തവണ്ണം നിങ്ങൾ അസ്വസ്ഥനാണ്.

12. താൽപ്പര്യമില്ലായ്മ

- a. നിങ്ങൾക്ക് മറ്റുള്ളവരിലും അവരുടെ പ്രവർത്തനങ്ങളിലും താൽപ്പര്യം നഷ്ടപ്പെട്ടിട്ടില്ല.
- b. പണ്ടത്തെക്കാളും നിങ്ങൾക്ക് മറ്റുള്ളവരിലും വസ്തുക്കളിലും താൽപ്പര്യം കുറവാണ്.
- c. നിങ്ങൾക്ക് വ്യക്തി താൽപ്പര്യങ്ങളും വസ്തു താൽപ്പര്യങ്ങളും കുറഞ്ഞു വരുന്നു.
- d. ഒന്നിലും ഒരു താൽപ്പര്യവും തോന്നുന്നില്ല.

d. നിങ്ങൾക്ക് സംഭവിക്കുന്ന എല്ലാ അനർത്ഥങ്ങൾക്കും നിങ്ങൾ നിങ്ങളെത്തന്നെ കുറ്റപ്പെടുത്തുന്നു.

9. ആത്മഹത്യ ചിന്ത

- a. ആത്മഹത്യയെക്കുറിച്ച് നിങ്ങൾക്ക് ചിന്തയില്ല.
- b. നിങ്ങൾക്ക് നിങ്ങളെത്തന്നെ കൊല്ലുവാനുള്ള ചിന്തകൾ ഉണ്ട് എന്നാൽ അതിന് കഴിയുന്നില്ല.
- c. നിങ്ങൾ നിങ്ങളെത്തന്നെ കൊല്ലുവാൻ ഇഷ്ടപ്പെടുന്നു.
- d. നിങ്ങൾക്ക് അവസരം ലഭിക്കുകയാണെങ്കിൽ നിങ്ങൾക്ക് നിങ്ങളെത്തന്നെ കൊല്ലും.

10. സങ്കടപ്പെടുക

- a. നിങ്ങൾ പതിവിലും കൂടുതൽ സങ്കടപ്പെടുന്നില്ല.
- b. നിങ്ങൾക്ക് പതിവിലും കൂടുതലായി സങ്കടം വരുന്നു.
- c. നിസാരകാര്യങ്ങൾക്കും നിങ്ങൾ കരയുന്നു.
- d. നിങ്ങൾക്ക് കരയണമെന്ന് തോന്നിയാലും അതിന് സാധിക്കുന്നില്ല.

11. പ്രക്ഷോഭം

- a. നിങ്ങൾ സാധാരണയെക്കാൾ കൂടുതൽ മാനസിക സംഘർഷം അനുഭവപ്പെടുന്നില്ല.
- b. നിങ്ങൾ പതിവിലും കൂടുതൽ അസ്വസ്ഥനായി തോന്നുന്നു.
- c. നിങ്ങൾ താങ്ങാവുന്നതിലപ്പുറം മാനസിക സംഘർഷം അനുഭവിക്കുന്ന വ്യക്തിയാണ്.
- d. എന്തെങ്കിലും ചെയ്യാൻ കഴിയാത്തവണ്ണം നിങ്ങൾ അസ്വസ്ഥനാണ്.

12. താൽപ്പര്യമില്ലായ്മ

- a. നിങ്ങൾക്ക് മറ്റുള്ളവരിലും അവരുടെ പ്രവർത്തനങ്ങളിലും താൽപ്പര്യം നഷ്ടപ്പെട്ടിട്ടില്ല.
- b. പണ്ടത്തെക്കാളും നിങ്ങൾക്ക് മറ്റുള്ളവരിലും വസ്തുക്കളിലും താൽപ്പര്യം കുറവാണ്.
- c. നിങ്ങൾക്ക് വ്യക്തി താൽപ്പര്യങ്ങളും വസ്തു താൽപ്പര്യങ്ങളും കുറഞ്ഞു വരുന്നു.
- d. ഒന്നിലും ഒരു താൽപ്പര്യവും തോന്നുന്നില്ല.

13. തീരുമാനമെടുക്കാൻ കഴിയാത്ത അവസ്ഥ
 - a. എന്നത്തേതുപോലെ നിങ്ങൾക്ക് തീരുമാനമെടുക്കാൻ സാധിക്കുന്നു.
 - b. നിങ്ങൾക്ക് തീരുമാനമെടുക്കാൻ പതിവിലും വളരെ ബുദ്ധിമുട്ടുള്ളതായി തോന്നുന്നു.
 - c. നിങ്ങൾക്ക് തീരുമാനമെടുക്കാൻ പതിവിലും കൂടുതൽ ബുദ്ധിമുട്ട് അനുഭവപ്പെടുന്നു.
 - d. എന്തു തീരുമാനമെടുക്കാനും നിങ്ങൾ ബുദ്ധിമുട്ടുന്നു.
14. അയോഗ്യത
 - a. നിങ്ങൾക്ക് നിങ്ങൾ അയോഗ്യനാണെന്ന് തോന്നുന്നില്ല.
 - b. മുമ്പുള്ളതുപോലെ നിങ്ങൾക്ക് നിങ്ങളെ വിലമതിക്കാനാണുണ്ടായത്.
 - c. നിങ്ങൾ മറ്റുള്ളവരുമായി താരതമ്യപ്പെടുത്തുമ്പോൾ വിലയില്ലാത്തവനായി തോന്നുന്നു.
 - d. നിങ്ങൾ മുഴുവനായും വിലയില്ലാത്തവനാണെന്ന് തോന്നുന്നു.
15. ഉന്മേഷമില്ലായ്മ
 - a. നിങ്ങൾക്ക് എന്നത്തേതും പോലെ ഉന്മേഷമുണ്ട്.
 - b. നിങ്ങൾക്ക് മുമ്പുള്ളതിനേക്കാളും ഉന്മേഷം കുറവാണ്.
 - c. നിങ്ങൾക്ക് നന്നായി ചെയ്യുവാനുള്ള ഉന്മേഷമില്ല.
 - d. നിങ്ങൾക്ക് യാതൊന്നും ചെയ്യുവാനുള്ള ഉന്മേഷമില്ല.
16. ഉറക്കത്തിന്റെ രീതിയിലുള്ള മാറ്റം
 - a. നിങ്ങൾക്ക് മുമ്പത്തേപ്പോലെ ഉറങ്ങാൻ സാധിക്കുന്നു.
 - b. നിങ്ങൾ പതിവായി ഉറങ്ങുന്നതുപോലെ ഉറങ്ങാൻ കഴിയുന്നില്ല.
 - c. നിങ്ങൾ പതിവിനേക്കാൾ 1 - 2 മണിക്കൂർ നേരത്തേ ഉണരുന്നു എന്നാൽ വീണ്ടും ഉറങ്ങാൻ ബുദ്ധിമുട്ടാണ്.
 - d. നിങ്ങൾ പതിവിലും വളരെ നേരത്തേ ഉണരുകയും പിന്നീട് ഉറങ്ങാൻ കഴിയാതെ വരികയും ചെയ്യുന്നു.

17. അസ്വസ്ഥത

- a. നിങ്ങൾ പതിവിലും കൂടുതൽ അസ്വസ്ഥനാകുന്നില്ല.
- b. നിങ്ങൾ പതിവിലും കൂടുതൽ അസ്വസ്ഥനാകുന്നു.
- c. നിങ്ങൾ പതിവിലും വളരെ കൂടുതൽ അസ്വസ്ഥനാകുന്നു.
- d. നിങ്ങൾ എപ്പോഴും അസ്വസ്ഥനാണ്.

18. വിശപ്പിലുള്ള മാറ്റം

- a. നിങ്ങളുടെ വിശപ്പ് പതിവിലും കൂടുതലായില്ല.
- b. നിങ്ങളുടെ വിശപ്പ് പതിവുപോലെയില്ല.
- c. നിങ്ങളുടെ വിശപ്പ് വളരെയധികം കുറവാണ്.
- d. നിങ്ങൾക്ക് ഒരു സമയവും വിശപ്പില്ല.

19. ശ്രദ്ധിക്കുവാനുള്ള ബുദ്ധിമുട്ട്

- a. നിങ്ങൾക്ക് എന്നും ശ്രദ്ധിക്കുവാൻ കഴിയുന്നു.
- b. നിങ്ങൾക്ക് പതിവുപോലെ കഴിയുന്നില്ല.
- c. നിങ്ങൾക്ക് ഒന്നിലും കൂടുതൽ സമയം ശ്രദ്ധിക്കാൻ കഴിയുന്നില്ല.
- d. നിങ്ങൾക്ക് യാതൊന്നിലും ശ്രദ്ധിക്കാൻ കഴിയുന്നില്ല.

20. ക്ഷീണം

- a. നിങ്ങൾ പതിവിലേറെ ക്ഷീണിതനായിട്ടില്ല.
- b. നിങ്ങൾ പതിവിനേക്കാൾ വേഗത്തിൽ ക്ഷീണിതനാണ്.
- c. നിങ്ങൾക്ക് സാധാരണ കാര്യങ്ങൾ ചെയ്യുവാൻ തന്നെ ക്ഷീണമാണ്.
- d. നിങ്ങൾ പതിവിലുള്ളതിനേക്കാൾ വളരെ ക്ഷീണിതനാണ്.

21. ലൈംഗികതയിൽ താൽപ്പര്യമില്ലായ്മ

- a. നിങ്ങളുടെ ലൈംഗികതയിൽ അധികം മാറ്റമുണ്ടായിട്ടുള്ളതായി തോന്നിയിട്ടില്ല.
- b. നിങ്ങളിൽ സാധാരണയെക്കാൾ ലൈംഗിക താൽപ്പര്യം കുറഞ്ഞിട്ടുണ്ട്.
- c. ഇപ്പോൾ നിങ്ങൾക്ക് ലൈംഗികതാൽപ്പര്യം വളരെ കുറഞ്ഞിരിക്കുന്നു.
- d. നിങ്ങൾക്ക് ലൈംഗികതാൽപ്പര്യം മുഴുവനായും നഷ്ടപ്പെട്ടിരിക്കുന്നു.

APPENDIX-H

EVALUATION CRITERIA RATING SCALE FOR VALIDATION OF TOOL

Respected Madam/Sir,

Instructions:

Kindly review the items in the tool. If you are agree with the criteria, please place a tick mark in “RELEVANT” column otherwise place the tick mark in “NEED MODIFICATION” column or “NOT RELEVANT” and give your comments in the remarks column.

SECTION A: DEMOGRAPHIC VARIABLES

SL.NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1	Age				
2	Gender				
3	Marital status				
4	Religion				
5	Type of family				
6	Education				
7	Occupation				
8	Income				
9	Frequency of dialysis				

SECTION B: BECK'S DEPRESSION SCALE ON DEPRESSION AMONG
CLIENTS ON HEMODIALYSIS

SL NO	ITEM	RELEVANT	NEEDS MODIFICATION	NOT RELEVANT	REMARKS
1	Sadness				
2	Pessimism				
3	Past failure				
4	Loss of pleasure				
5	Guilty feeling				
6	Punishment feelings				
7	Self-dislike				
8	Self- - criticainess				
9	Suicidal thoughts or Wishes				
10	Crying				
11	Agitation				
12	Loss of interest				
13	Indecisiveness				

14	Worthlessness				
15	Loss of energy				
16	Changes in sleeping pattern				
17	Irritability				
18	Changes in appetite				
19	Concentration difficulty				
20	Tiredness or fatigue				
21	Loss of interest in sex				

Suggestion if any:

APPENDIX - I

INTERVENTION ON MUSIC THERAPY

INTRODUCTION

Music Therapy can alter brain patterns and offer therapeutic help for patients suffering depression who is undergoing hemodialysis. There are a number of clinical research studies showing the benefits of these therapy.

DEFINITION

It refers to target oriented use of certain musce ragas such as Karakarapriya, Sindhu, Bhairavi, Kalayani raga, Hindola and Mohana to restore, maintain and improve emotional health and wellbeing among clients undergoing hemodialysis.

INTERVENTION

- Get consent form from the client.
- Inform the client regarding Music Therapy (Karakarapriya, Sindhubhairavi, Kalayani raga, Hindola and Mohana ragas were used).
- Give the Walkman with headset to the clients about 20 minutes for 14 days.
- Ask the client to calm.
- Ask the client to listen.

AFTER INTERVENTION

- Check the client's response
- Listen clients response



APPENDIX - J

EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF INTERVENTION ON MUSIC THERAPY

INSTRUCTION

The expert is requested to go through following evaluation criteria checklist prepared for validating the intervention on Music therapy on hemodialysis clients.

There are three columns given for responses and a column and facilitate your remarks in the remarks column given

INTERPRETATION COLUMNS

- Meets the criteria - Column I
- Partially meets the criteria - Column II
- Does not meet the criteria - Column III

SL.NO	CRITERIA	I	II	III	REMARKS
I.	CONTENT				
1.	SELECTION OF CONTENT				
1.1	Content reflects the objectives				
1.2	Content has up to date knowledge				
1.3	Content is comprehensive for the learning need of end stage renal disease				

	patients				
1.4	Content provides correct and accurate information				
1.5	Content coverage				
2.	ORGANIZATION OF CONTENT				
2.1	Logical sequences				
2.2	Continuity				
2.3	Integration				
II.	LANGUAGE				
1.	Local language is used in simple and in understandable dialogues				
2.	Technical terms are explained at the level of learners ability				
III.	FEASIBILITY/PRACTICABILITY				
1.	Is suitable to the clients				
2.	Permit self learning				
3.	Acceptable to clients				
4.	Interesting and useful to clients				
5.	Suitable for setting				
IV.	ANY OTHER SUGGESTIONS				
	•				
	•				
	•				

APPENDIX – K

Content Validity Certificate

ANNAI MEENAKSHI COLLEGE OF NURSING

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Approved by the Indian Nursing Council, New Delhi &

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Email : ceandct@dataone.in

ceandct@gmail.com

Website: www.annaimeenakshi.in

Ref. No.

Date :

Certificate of Validation

This is to certify that the tools developed by **Ms. Nimi Paul M.Sc (N) I - Year student of Annai Meenakshi College of Nursing, Coimbatore, Tamil Nadu (Affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai)** is validated by undersigned and can proceed with this tool and conduct the main study for dissertation entitled **"A Study to Evaluate the Effectiveness of Music Therapy in Terms of Depression among Clients on Hemodialysis in a Selected Hospital at Kerala."**

Place: Coimbatore

Signature

Date:

Name and Designation

Managed by : **CHEMISTS EDUCATIONAL & CHARITABLE TRUST**

Administrative Office : College Campus, Madukkarai Market Road, Coimbatore - 641 021.

APPENDIX-L

CRITERIA FOR SAMPLE SELECTION CLIENTS WITH DEPRESSION WHO IS UNDERGOING HEMODIALYSIS

Sample

Slno	Criteria	Yes	No
1	Sadness		
2	Loss of Interest		
3	Changes of sleeping pattern		
4	Worthlessness		

Score : 4 accept as sample

<4 not accepted as sample.

APPENDIX-M

Letter Seeking Consent of subjects participation in the study

CONSENT FORM

Respected Sir/Madam,

I am NimiPaul. I am doing my second year M.Sc(N) in AnnaiMeenakshi College of Nursing. I am doing study project on Effectiveness Of Music Therapy On level of depression among clients on Hemodialysis. I request your cooperation to complete my study project. I am sure that you won't get any side effect by this treatment.

Mr./Mrs.-----I heard about the Effectiveness Of Music Therapy on level of depression among clients on hemodialysis from Ms. Nimi Paul. She explained me about the benefits of this treatment. I agree with this treatment of Music therapy and this study project whole heartedly.

Yours sincerely,

Place:

Date:

APPENDIX-M

Letter Seeking Consent of subjects participation in the study

அனுமதி விண்ணப்பம்

மதிப்பிற்குரிய ஐயா / அம்மா,

நான், நிம்மிபோல், தற்பொழுது அன்னை மீனாட்சி செவிலியர் கல்லூரியில் இரண்டாம் வருடம் பயின்று வருகிறேன். நான் இரத்த சுத்திகரிப்பு செய்யப்போகின்ற நோயாளிகளுக்கு ஏற்படும் உளசம்மந்தமான நோயை இசையின் மூலம் குணப்படுத்துவது பற்றி ஒரு ஆய்வு மேற்கொள்ள இருக்கிறேன். இந்த ஆய்விற்கு தங்களது முழு ஒத்துழைப்பு வேண்டுமென வேண்டுகிறேன். இதன் மூலம் எந்த நோயாளிக்கும் பக்கவிளைவு வராது என உறுதியளிக்கிறேன்.

திரு. / திருமதி. ஆகிய நான் இரத்த சுத்திகரிப்பு செய்யப் போகின்ற நோயாளிகளுக்கு ஏற்படும் உளசம்மந்தமான நோயை இசையின் மூலம் குணப்படுத்துவது பற்றியும், அதன் நன்மைகள் பற்றியும் எனக்கு தெளிவாக செல்வி. நிம்மிபோல் எடுத்துரைத்தார். நான் முழுமனதுடன் இந்த சிகிச்சையை மேற்கொள்ள சம்மதிக்கிறேன்.

தங்கள் உண்மையுள்ள

இடம்

நாள்

APPENDIX-M

Letter Seeking Consent of subjects participation in the study

സമ്മതപത്രിക

നമസ്കാരം. ഞാൻ നിമിപോൾ. കോയമ്പത്തൂരിലുള്ള അണ്ണെ മീനാക്ഷി കോളജ് ഓഫ് നേഴ്സിംഗിൽ എം.എസ്.സി നേഴ്സിംഗിന് പഠിക്കുന്നു. ഹീമോ ഡയാലിസിസിന് വിധേയമായവർക്ക് വിഷാദം കുറയ്ക്കുന്നതിനു വേണ്ടിയുള്ള സംഗീതചികിത്സയെക്കുറിച്ചുള്ള ഗവേഷണം ചെയ്യുകയാണ് ഞാൻ. ആയതിനാൽ അതിനു വേണ്ടി താങ്കളുടെ സഹകരണം ഞാൻ വിനീതമായി അഭ്യർത്ഥിക്കുന്നു. എന്റെ ഗവേഷണത്തിൽ ഉൾപ്പെടുന്നതിനാൽ താങ്കൾക്ക് യാതൊരുവിധ ദുഷ്ഫലങ്ങളും വരില്ലെന്ന് ഞാൻ ഉറപ്പു തരുന്നു.

ശ്രീ/ശ്രീമതി മിസ് നിമി പോളിലൂടെ സംഗീത ചികിത്സയിലൂടെ വിഷാദത്തെ കുറയ്ക്കുന്നതിനെക്കുറിച്ച് മനസ്സിലാക്കിയിരിക്കുന്നു. ഇതിന്റെ എല്ലാവിധ ഫലങ്ങളും എനിക്ക് വളരെ വ്യക്തമായി വിശദീകരിച്ച് തന്നിട്ടുണ്ട്. ആയതിനാൽ ഈ ഗവേഷണത്തിൽ പങ്കുകൊള്ളുന്നതിന് ഞാൻ സ്വമേധയാ സമ്മതിച്ചു കൊള്ളുന്നു.

സ്ഥലം:

തീയതി :

ഒപ്പ്

Administering Questionnaire



Administering Music Therapy

